Welcome to STN International! Enter x:x

LOGINID:SSPTAJLK1617

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	DEC	01	ChemPort single article sales feature unavailable
NEWS	3	FEB	02	Simultaneous left and right truncation (SLART) added
				for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS	4	FEB		GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS	5	FEB		Patent sequence location (PSL) data added to USGENE
NEWS		FEB		COMPENDEX reloaded and enhanced
NEWS	7	FEB		WTEXTILES reloaded and enhanced
NEWS	8	FEB	19	New patent-examiner citations in 300,000 CA/CAplus
				patent records provide insights into related prior art
NEWS	9	FEB	19	Increase the precision of your patent queries use
				terms from the IPC Thesaurus, Version 2009.01
NEWS	10	FEB	23	Several formats for image display and print options
				discontinued in USPATFULL and USPAT2
NEWS	11	FEB	23	MEDLINE now offers more precise author group fields
				and 2009 MeSH terms
NEWS	12	FEB	23	TOXCENTER updates mirror those of MEDLINE - more
				precise author group fields and 2009 MeSH terms
NEWS	13	FEB	23	Three million new patent records blast AEROSPACE into
			0.5	STN patent clusters
NEWS	14	FEB	25	USGENE enhanced with patent family and legal status display data from INPADOCDB
NEWS	1.6	MAR	06	INPADOCDB and INPAFAMDB enhanced with new display
MEMO	10	PLIME	00	formats
NEWS	16	MAR	11	EPFULL backfile enhanced with additional full-text
112110				applications and grants
NEWS	17	MAR	11	ESBIOBASE reloaded and enhanced
NEWS	18	MAR	20	CAS databases on STN enhanced with new super role
				for nanomaterial substances
NEWS	19	MAR	23	CA/CAplus enhanced with more than 250,000 patent
				equivalents from China
NEWS		MAR		IMSPATENTS reloaded and enhanced
NEWS	21	APR	03	CAS coverage of exemplified prophetic substances enhanced
NEWS	22	APR	0.7	STN is raising the limits on saved answers
NEWS		APR		CA/CAplus now has more comprehensive patent assignee
				information
NEWS	24	APR	26	USPATFULL and USPAT2 enhanced with patent
				assignment/reassignment information
NEWS	25	APR	28	CAS patent authority coverage expanded
NEWS		APR		ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS	27	APR	28	Limits doubled for structure searching in CAS
				REGISTRY

AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 11:23:56 ON 05 MAY 2009

=> FILE REG

COST IN U.S. DOLLARS
FULL ESTIMATED COST

.

SINCE FILE

ENTRY

2.86

TOTAL

2.86

SESSION

FILE 'REGISTRY' ENTERED AT 11:31:41 ON 05 MAY 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COYFRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 MAY 2009 HIGHEST RN 1141929-94-3 DICTIONARY FILE UPDATES: 3 MAY 2009 HIGHEST RN 1141929-94-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
=> E ascorbic acid 2-glucoside/CN
                                  ASCORBIC ACID 2,5,6-TRISULFATE SODIUM SALT/CN
E1
                        1
                                  ASCORBIC ACID 2-(4-VINYLBENZOATE)/CN
                        0 --> ASCORBIC ACID 2-GLUCOSIDE/CN
                                ASCORBIC ACID 2-PHOSPHATE/CN
ASCORBIC ACID 2-PHOSPHATE MAGNESIUM SALT/CN
ASCORBIC ACID 2-PYROPHOSPHATE/CN
E4
E5
                        1
E6
                        1
                      ASCORBIC ACID 2-PYROPHOSPHATE SODIUM SALT/CN
1 ASCORBIC ACID 2-SULFATE/CN
1 ASCORBIC ACID 2-SULFATE DEHYDROGENASE/CN
1 ASCORBIC ACID 2-SULFATE DEHYDROGENASE/CN
1 ASCORBIC ACID 2-SULFATE SULFOHYDROLASE/CN
1 ASCORBIC ACID 2-TRIPHOSPHATE/CN
E7
E8
E9
E10
E11
E12
```

```
=> S ascorbic acid
          4589 ASCORBIC
      11774784 ACID
          8376 ACIDS
      11780813 ACID
                 (ACID OR ACIDS)
          4567 ASCORBIC ACID
                 (ASCORBIC (W) ACID)
=> S ascorbic acid/CN
             2 ASCORBIC ACID/CN
=> D L2 1-2
1.2
    ANSWER 1 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN
RN
    62624-30-0 REGISTRY
     Entered STN: 16 Nov 1984
ED
     Ascorbic acid (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     DL-Ascorbic acid
FS
     STEREOSEARCH
     C6 H8 O6
MF
CI
     COM
LC
     STN Files:
                 ADISNEWS, AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, GMELIN*, HSDB*, MEDLINE, PIRA,
       PROMT, TOXCENTER, TULSA, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
Relative stereochemistry.
            OH
            Н
 HO
          OH
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
             537 REFERENCES IN FILE CA (1907 TO DATE)
              17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             539 REFERENCES IN FILE CAPLUS (1907 TO DATE)
     ANSWER 2 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN
RN
     50-81-7 REGISTRY
     Entered STN: 16 Nov 1984
     L-Ascorbic acid (CA INDEX NAME)
OTHER NAMES:
CN
     (+)-Ascorbic acid
CN
     100M
     3-keto-L-Gulofuranolactone
CN
     3-0xo-L-gulofuranolactone
CN
     Adenex
CN
     Allercorb
```

Antiscorbic vitamin

Antiscorbutic vitamin

CN

```
CN Ascoltin
CN
    Ascorbajen
CN
    Ascorbic acid
CN Ascorbicap
CN Ascorbutina
CN Ascorell
CN Ascorin
CN
   Ascorteal
CN
    Ascorvit
CN
    C-L 6/PW
CN
    C-Ouin
CN
    C-Vimin
CN
    Cantan
CN
    Cantaxin
CN
    Catavin C
CN
    Ce-Mi-Lin
CM
    Ce-Vi-Sol
    Cebicure
CN
CN
    Cebion
CN
    Cebione
CN
    Cecon
CN
    Cegiolan
CN
    Cealion
CN
    Ceklin
CN
    Celaskon
CN
    Celin
CN
    Cell C
CN
    Cemagyl
CN
    Cenetone
    Cereon
CN
    Cergona
CN
CN
    Cescorbat
CN
    Cetamid
CN
    Cetane
CN
    Cetane-Caps TC
CN
    Cetebe
CN
    Cetemican
CN
    Cevalin
CN
    Cevatine
CN
    Cevex
CN
    Cevimin
CN
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
    STEREOSEARCH
     882690-91-7, 884381-69-5, 885512-24-3, 1018124-03-2, 623158-95-2,
DR
     56533-05-2, 57304-74-2, 57606-40-3, 56172-55-5, 129940-97-2, 14536-17-5,
     50976-75-5, 154170-90-8, 89924-69-6, 88845-26-5, 30208-61-8, 259133-78-3
ME
     C6 H8 O6
CI
    COM
       Supplier: Intelbioscan, Ltd.
     STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX,
LC
       CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT,
       ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT,
       IFIUDB, IMSCOSEARCH, IMSPRODUCT, IPA, MEDLINE, MRCK*, MSDS-OHS,
       NAPRALERT, PHAR, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE,
       TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
                     DSL**, EINECS**, TSCA**, WHO
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

94955 REFERENCES IN FILE CA (1907 TO DATE)

2102 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

95183 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> E adenosine 5'-monophosphate
MISMATCHED QUOTE IN EXPAND TERM
```

Ouotation marks (or apostrophes) must be used in pairs, one before and one after the expression you are setting off or masking.

=> E adenosine monophosphate/CN 1

ADENOSINE L-CYSTEINE HYDROCHLORIDE MIXTURE/CN E2 ADENOSINE MONOPHOSPHATASE/CN

E3 1 --> ADENOSINE MONOPHOSPHATE/CN

E4 1 ADENOSINE MONOPHOSPHATE DEAMINASE/CN E5 1 ADENOSINE MONOPHOSPHATE DEAMINASE (HUMAN ISOFORM E GENE AMPD

3 FRAGMENT)/CN 1 ADENOSINE MONOPHOSPHATE DEAMINASE (HUMAN ISOFORM E GENE AMPD E6 3)/CN

ADENOSINE MONOPHOSPHATE DEAMINASE 1 (SUS SCROFA DOMESTICA GE E7 1 NE AMPD1 FRAGMENT)/CN

E8 1 ADENOSINE MONOPHOSPHATE DEAMINASE 1 ISOFORM M (SUS SCROFA DO MESTICA GENE AMPD1)/CN

E9 1 ADENOSINE MONOPHOSPHATE DEAMINASE 2 (ISOFORM L) (HUMAN CLONE MGC:12857 IMAGE:4101667)/CN

E10 ADENOSINE MONOPHOSPHATE DEAMINASE 2 (ISOFORM L) (MOUSE STRAI N C57BL/6 CLONE MGC:61170 IMAGE:6812571)/CN E11 ADENOSINE MONOPHOSPHATE DEAMINASE 2 (ISOFORM L), ISOFORM 2 (

HUMAN CLONE MGC:12857 IMAGE:4101667)/CN

E12 1 ADENOSINE MONOPHOSPHATE DEAMINASE 2 (ISOFORM L), ISOFORM 2 (HUMAN CLONE MGC:88800 IMAGE:4130690)/CN

=> S E3

1 "ADENOSINE MONOPHOSPHATE"/CN L3

=> D L3

- ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN L3
- 61-19-8 REGISTRY RN
- Entered STN: 16 Nov 1984
- CN 5'-Adenylic acid (CA INDEX NAME)

OTHER NAMES:

CN 5 ' - AMP

- CN Adenosine 5'-(dihydrogen phosphate)
- CN Adenosine 5'-monophosphate
- CN Adenosine 5'-phosphate
- CN Adenosine 5'-phosphoric acid

```
CN
    Adenosine phosphate
CN
    Adenosine-5'-monophosphoric acid
CN
    Adenosine-5-monophosphoric acid
CN
    Adenovite
CN
    Adenylic acid
    AMP
CN
    AMP (nucleotide)
CN
    Cardiomone
CN
    Lvcedan
CN
    Mv-B-Den
CN
    NSC 20264
CN
     Phosaden
CN
     Phosphaden
CN
    Phosphentaside
FS
     STEREOSEARCH
     697214-87-2, 162756-82-3, 53624-78-5, 67583-85-1, 47286-65-7, 47287-97-8
DR
MF
    C10 H14 N5 O7 P
CI
     COM
LC
     STN Files:
                 ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
       BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN,
       CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT,
       IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PIRA, PROMT, RTECS*,
       SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
                    DSL**, EINECS**, TSCA**, WHO
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
Absolute stereochemistry.
```

=> E adenosine 5/CN

Adenosine monophosphate

CM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

19209 REFERENCES IN FILE CA (1907 TO DATE)
634 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
19237 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
1
                   ADENOSINE 3'A-NAPHTHYLPHOSPHATE/CN
E2
                   ADENOSINE 3-PHENYLPHOSPHONATE/CN
E3
               --> ADENOSINE 5/CN
E4
             1
                   ADENOSINE 5', 3'-PHOSPHOURIDINE/CN
E5
             1
                   ADENOSINE 5'-(A, B-METHYLENE) DIPHOSPHATE/CN
Е6
             1
                   ADENOSINE 5'-(A, B-METHYLENETRIPHOSPHATE)/CN
E7
             1
                   ADENOSINE 5'-(A, B-METHYLENETRIPHOSPHONATE)/CN
E8
             1
                   ADENOSINE 5'-(A-(RP)-BORANO)TRIPHOSPHATE/CN
E9
             1
                   ADENOSINE 5'-(A-THIODIPHOSPHATE)/CN
E10
             1
                   ADENOSINE 5'-(B, F-IMIDOTRIPHOSPHATE)/CN
E11
             1
                   ADENOSINE 5'-(B, F-IMINOTRIPHOSPHATE)/CN
```

```
E12
           1
                       ADENOSTRE 5'- (B. C-METHYLENE) TRIPHOSPHATE/CN
=> E
              ADENOSINE 5'-(B-BROMOETHANEPHOSPHONATE)/CN
ADEMOSINE 5'-(B-BROMOETHAL)PHOSPHONATE/CN
ADEMOSINE 5'-(G-B-HIODIPHOSPHATE)/CN
ADENOSINE 5'-(G-S)TRIPHOSPHATE)/CN
ADENOSINE 5'-(G-S)TRIPHOSPHATE)/CN
ADENOSINE 5'-(G-CELLOROETHYL) PHOSPHATE/CN
ADEMOSINE 5'-(G-CELLOROETHYL) PHOSPHATE/CN
ADEMOSINE 5'-(G-CHLOROETHYL)PHOSPHATE/CN
ADEMOSINE 5'-(G-CHLOROETHYL)PHOSPHATE/CN
ADEMOSINE 5'-(G-CHLOROMETHYL)PHOSPHONATE/CN
ADEMOSINE 5'-(CHLOROMETHYL)PHOSPHONATE/CN
ADEMOSINE 5'-(DECAHYDROGEN NONAPHOSPHATE)/CN
ADEMOSINE 5'-(DECAHYDROGEN NONAPHOSPHATE), P'''''.FWDARW.
5'-ESTER WITH ADEMOSINE/CN
E13
E14
E15
E16
E17
E18
E19
E20
E21
E22
E23
                       5'-ESTER WITH ADENOSINE/CN
E24
               1
                       ADENOSINE 5'-(DIHYDROGEN PHOSPHATE)/CN
=> E
E25
                 1
                       ADENOSINE 5'-(DODECAHYDROGEN UNDECAPHOSPHATE)/CN
E26
                        ADENOSINE 5'-(DODECAHYDROGEN UNDECAPHOSPHATE), P'''''.F
                 1
                        WDARW.5'-ESTER WITH ADENOSINE/CN
E27
                1
                        ADENOSINE 5'-(EICOSAHYDROGEN NONADECAPHOSPHATE)/CN
                        ADENOSINE 5'-(HENEICOSAHYDROGEN EICOSAPHOSPHATE)/CN
E28
                1
                       ADENOSINE 5'-(HEPTADECAHYDROGEN HEXADECAPHOSPHATE)/CN
E29
                1
                        ADENOSINE 5'-(HEPTADECAHYDROGEN HEXADECAPHOSPHATE), P'''''
                1
                         ''''''.FWDARW.5'-ESTER WITH ADENOSINE/CN
                 1
                       ADENOSINE 5'-(HEPTAHYDROGEN HEXAPHOSPHATE)/CN
E32
                1
                       ADENOSINE 5'-(HEPTAHYDROGEN HEXAPHOSPHATE), 2'-O-METHYL-, P'
                        ''''.FWDARW.5'-ESTER WITH ADENOSINE/CN
E33
                1
                       ADENOSINE 5'-(HEPTAHYDROGEN HEXAPHOSPHATE), 3'-(4-BENZOYLBEN
                        ZOATE), P''''.FWDARW.5'-ESTER WITH ADENOSINE/CN
                        ADENOSINE 5'-(HEPTAHYDROGEN HEXAPHOSPHATE), P''''.FWDARW.5'
E34
                1
                        -ESTER WITH ADENOSINE/CN
                       ADENOSINE 5'-(HEPTAHYDROGEN HEXAPHOSPHATE), P''''.FWDARW.5'
E35
                1
                        -ESTER WITH ADENOSINE, AMMONIUM SALT/CN
E36
                1
                       ADENOSINE 5'-(HEPTAHYDROGEN HEXAPHOSPHATE), P''''.FWDARW.5'
                        -ESTER WITH ADENOSINE, HEXAAMMONIUM SALT/CN
=> E adenosine 3
NUMBER OF TERMS TO DISPLAY IS OUT OF RANGE
The total number of terms displayed in a single EXPAND command
must be in the range 5-25.
=> E adenosine 3/CN
```

E1 1 ADENOSINE 2'-PHOSPHATE 5'-PYROPHOSPHATE/CN E2 ADENOSINE 2-SULFONATE/CN E3 0 --> ADENOSINE 3/CN ADENOSINE 3 (DROSOPHILA AFFINIS GENE ADE3 FRAGMENT)/CN E4 1 E5 ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN 0101.3 GENE ADE3 FRAG 1 MENT) / CN 1 ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN 0101.4 GENE ADE3 FRAG E6 MENT)/CN E7 1 ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN 0101.5 GENE ADE3 FRAG MENT)/CN E8 ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN 0101.7 GENE ADE3 FRAG MENT)/CN E9 1 ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN 0101.9 GENE ADE3 FRAG MENT)/CN E10 1 ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN MA28 GENE ADE3 FRAGME

ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN MA32 GENE ADE3 FRAGME

NT)/CN

NT)/CN

1

E11

```
E12
               1
                        ADENOSTNE 3 (DROSOPHILA MIRANDA STRAIN MSH22 GENE ADE3 FRAGM
                        ENT)/CN
=> E
E13
                      ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN MSH38 GENE ADE3 FRAGM
                1
                       ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN SP138 GENE ADE3 FRAGM
E14
                1
E15
                1
                      ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN SP235 GENE ADE3 FRAGM
E16
                      ADENOSINE 3 (DROSOPHILA MIRANDA STRAIN SP295 GENE ADE3 FRAGM
                       ENT)/CN
E17
               1
                       ADENOSINE 3 (DROSOPHILA PSEUDOOBSCURA GENE ADE3 FRAGMENT)/CN
E18
                       ADENOSINE 3',5'-BISPHOSPHATE/CN
               1
E19
               1
                      ADENOSINE 3',5'-CYCLIC PHOSPHATE/CN
E20
               1
                      ADENOSINE 3',5'-CYCLIC PHOSPHATE 2'-TOSYLATE/CN
E21
               1
                      ADENOSINE 3',5'-CYCLIC PHOSPHATE TRIETHYLAMMONIUM SALT/CN
                    ADENOSINE 3',5'-CYCLIC PHOSPHOROTHIOATE/CN
ADENOSINE 3',5'-CYCLIC-N-CYCLOHEXYL PHOSPHORAMIDATE/CN
E22
               1
               1
E23
E24
               1
                      ADENOSINE 3',5'-CYCLOPHOSPHATE/CN
=> E
                       ADENOSINE 3',5'-CYCLOSULFATE/CN
E25
                1
E26
                1
                       ADENOSINE 3',5'-CYCLOTHIOPHOSPHATE/CN
                       ADENOSINE 3',5'-DIPHOSPHATE/CN
E27
                      ADENOSINE 3',5'-DIPHOSPHATE, 2'-DEOXY-, 3',5'-ESTER WITH 2'-
               1
E28
                       DEOXYADENOSINE, 5'-METHYL ESTER/CN
               1
                      ADENOSINE 3',5'-DIPHOSPHATE, 5'-ANHYDRIDE WITH SULFURIC ACID
E29
                        /CN
E30
               1
                       ADENOSINE 3'.5'-DIPHOSPHATE, 5'-ANHYDRIDE WITH SULFURIC-35S
                       ACID/CN
                      ADENOSINE 3',5'-DIPYROPHOSPHATE/CN
               1
              ADENOSINE 3',5'-DIPTROPHOSPHATE/CN
ADENOSINE 3',5'-MONOPHOSPHATE PHOSPHODIESTERASE/CN
ADENOSINE 3',5'-MONOPHOSPHATE PHOSPHOHYDROLASE/CN
ADENOSINE 3',5'-MONOPHOSPHOTE MONOHYDRATE/CN
ADENOSINE 3',5'-MONOPHOSPHONATE MONOHYDRATE/CN
ADENOSINE 3',5'-MONOPHOSPHOROTHIOATE/CN
E32
E33
E34
E35
E36
=> E
              ADENOSINE 3',5'-MONOSULFATE/CN
ADENOSINE 3',5'-PHOSPHATE/CN
ADENOSINE 3',5'-PHOSPHATE (CYCLIC), 1-OXIDE/CN
ADENOSINE 3',5'-PHOSPHATE (HOSPHODIESTERASE/CN
ADENOSINE 3',5'-PHOSPHORIC ACID MAGNESIUM SALT/CN
ADENOSINE 3',5'-PHOSPHORIC ACID SOUTUM SALT/CN
ADENOSINE 3',5'-PHOSPHORIC ACID SOUTUM SALT/CN
ADENOSINE 3',5'-PHOSPHOROTHIOATE/CN
ADENOSINE 3',6'-EBNZYL PHOSPHATE)/CN
ADENOSINE 3'-(DENZYL PHOSPHATE)/CN
ADENOSINE 3'-(DIMYDROGEN PHOSPHATE)/CN
E37
E38
E39
E40
E41
E42
E43
E44
E45
                      ADENOSINE 3'-(HEPTAHYDROGEN HEXAPHOSPHATE), P''''.FWDARW.5'
E46
               1
                       -ESTER WITH ADENOSINE/CN
               1
                      ADENOSINE 3'-(HEXAHYDROGEN PENTAPHOSPHATE), P'''.FWDARW.5'-
E47
                       ESTER WITH ADENOSINE/CN
                       ADENOSINE 3'-(OCTAHYDROGEN HEPTAPHOSPHATE), P''''.FWDARW.5
E48
                1
                        '-ESTER WITH ADENOSINE/CN
=> E
E49
                1
                       ADENOSINE 3'-(PENTAHYDROGEN TETRAPHOSPHATE)/CN
E50
               1
                       ADENOSINE 3'-(PENTAHYDROGEN TETRAPHOSPHATE), 2',5'-DIDEOXY-/
E51
               1
                      ADENOSINE 3'-(PENTAHYDROGEN TETRAPHOSPHATE), 2',5'-DIDEOXY-,
                        SODIUM SALT/CN
E52
               1
                        ADENOSINE 3'-(PENTAHYDROGEN TETRAPHOSPHATE), 2'-DEOXY-/CN
```

```
E53
             1
                   ADENOSINE 3'-(PENTAHYDROGEN TETRAPHOSPHATE), 2'-DEOXY-, SODI
                   UM SALT/CN
                   ADENOSINE 3'-(PENTAHYDROGEN TETRAPHOSPHATE), 3'.FWDARW.5' ES
E54
             1
                   TER WITH URIDINE/CN
E55
                   ADENOSINE 3'-(PENTAHYDROGEN TETRAPHOSPHATE), P'''.FWDARW.5'-
             1
                   ESTER WITH ADENOSINE/CN
E56
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE)/CN
E57
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2',5'-BIS-O-(1-ME
                   THOXYETHYL) -/CN
E58
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2',5'-DIDEOXY-/CN
E59
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2',5'-DIDEOXY-, S
                   ODIUM SALT/CN
E60
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2'-DEOXY-/CN
=> E
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2'-DEOXY-, SODIUM
E61
             1
                    SALT/CN
E62
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2'-DEOXY-2'-FLUOR
                   O-/CN
E63
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2'-DEOXYADENYLYL-
                   (3'.FWDARW.5')-2'-DEOXYADENYLYL-(3'.FWDARW.5')-2'-DEOXYADENY
                   LYL-(3'.FWDARW.5')-2'-DEOXYADENYLYL-(3'.FWDARW.5')-2'-DEOXYA
                   DENYLYL-(3'.FWDARW.5/CN
E64
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 2'-O-METHYL-/CN
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), 5'-(TETRAHYDROGEN
E65
                    TRIPHOSPHATE) /CN
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), P'', FWDARW, 5'-EST
                   ER WITH ADENOSINE/CN
E67
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE), P''.FWDARW.5'-EST
                   ER WITH ADENOSINE, MANGANESE(2+) SALT/CN
ESS
             1
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE-P''-180)/CN
                   ADENOSINE 3'-(TETRAHYDROGEN TRIPHOSPHATE-P''-32P), 2',5'-DID
                   EOXY-/CN
E70
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE)/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2',5'-BIS-O-(1-METHO
E71
             1
                   XYETHYL) -/CN
E72
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2',5'-DIDEOXY-/CN
=> E
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2',5'-DIDEOXY-, P'-A
E73
             1
                   NHYDRIDE WITH (4-(2-AMINOETHYL)PHENYL)PHOSPHORAMIDIC ACID/CN
E74
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2',5'-DIDEOXY-, P'-A
                   NHYDRIDE WITH (4-AZIDOPHENYL)PHOSPHORAMIDIC-32P ACID/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2',5'-DIDEOXY-, P'-A
                   NHYDRIDE WITH 1-METHYL-3-(PHOSPHONO-32P)-1H-IMIDAZOLIUM, INN
                   ER SALT/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2',5'-DIDEOXY-, P'-A
E76
                   NHYDRIDE WITH PHOSPHOROTHIOIC ACID/CN
E77
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2',5'-DIDEOXY-, P',F
                   WDARW.P-ANHYDRIDE WITH (2-((1,4-DIOXO-4-((2-(4-(PHOSPHONOAMI
                   NO) PHENYL) ETHYL) AMINO) BUTYL) AMINO) ETHYL) CARBAMIC ACID/CN
E78
                   ADENOSINE 3'-(TRIHYDROĞEN DIPHOSPHATE), 2'-DEOXY-/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, 5'-(DIHYD
E79
                   ROGEN PHOSPHATE), P'.FWDARW.3' ESTER WITH 2'-DEOXY-5'-ADENYL
                   IC ACID/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, 5'-(HYDRO
E80
                   GEN 1H-IMIDAZOL-1-YLPHOSPHONATE), P'.FWDARW.3'-ESTER WITH 2'
                   -DEOXYADENOSINE 5'-(HYDROGEN 1H-IMIDAZOL-1-YLPHOSPHONATE)/CN
E81
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, 5'-(HYDRO
                   GEN 1H-IMIDAZOL-1-YLPHOSPHONATE), P'.FWDARW.5'-ESTER WITH 2'
                   -DEOXYADENOSINE 3'-(HYDROGEN 1H-IMIDAZOL-1-YLPHOSPHONATE)/CN
E82
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, P'-ANHYDR
```

```
IDE WITH PHOSPHOROTHIOIC ACID/CN
E83
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, P'-ANHYDR
                   IDE WITH PHOSPHOROTHIOIC-35S ACID/CN
E84
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, P'.FWDARW
                   .3'-ESTER WITH 2'-DEOXYADENOSINE/CN
=> E
E85
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, P'.FWDARW
                   .5'-ESTER WITH 2'-DEOXYADENOSINE/CN
E86
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, P'.FWDARW
                   .5'-ESTER WITH 2'-DEOXYADENOSINE, COMPLEX WITH 5'-URIDYLIC A
                   CID HOMOPOLYMER/CN
E87
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-, P'.FWDARW
                   .5'-ESTER WITH THYMIDINE/CN
E88
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-N-(DIPHENYL
                   ACETYL) -, 5'-(BIS(2-(METHYLSULFONYL)ETHYL) PHOSPHATE), P'.FW
                   DARW.3'-ESTER WITH BIS(2-(METHYLSULFONYL)ETHYL) 2'-DEOXY-N-(
                   DIPHENYLACETYL) -5'-A/CN
E89
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXY-N-(DIPHENYL
                   ACETYL) -, 5'-(BIS(2-(METHYLSULFONYL)ETHYL) PHOSPHATE), P'.FW
                   DARW.5'-ESTER WITH BIS(2-(METHYLSULFONYL)ETHYL) 2'-DEOXY-N-(
                   DIPHENYLACETYL) -3'-A/CN
E90
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-DEOXYGUANYLYL-(3'
                   .FWDARW.5')-CYTIDYLYL-(3'.FWDARW.5')-URIDYLYL-(3'.FWDARW.5')
                   -, CYCLIC NUCLEOTIDE, 3'-(ETHYL HYDROGEN PHOSPHATE)/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 2'-O-(1-ETHOXYETHYL)
E91
                   -, 5'-(TRIHYDROGEN DIPHOSPHATE)/CN
E92
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 5'-(DIHYDROGEN PHOSP
                   HATE)/CN
E93
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 5'-(DIHYDROGEN PHOSP
                   HATE), LITHIUM SALT/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 5'-(DIHYDROGEN PHOSP
             1
                   HATE), P'.FWDARW.5'-ESTER WITH 2'-DEOXY-3'-ADENYLIC ACID/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 5'-(TRIHYDROGEN DIPH
E95
             1
                   OSPHATE)/CN
E96
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 5'-(TRIHYDROGEN DIPH
                   OSPHATE), HEXALITHIUM SALT/CN
=> E
E97
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 5'-(TRIHYDROGEN DIPH
                   OSPHATE), LITHIUM SALT/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), 5'-(TRIHYDROGEN DIPH
E98
                   OSPHATE), P'.FWDARW.5'-ESTER WITH 3-(AMINOCARBONYL)-1-B
                   -D-RIBOFURANOSYLPYRIDINIUM, INNER SALT/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), GUANYLYL-(3'.FWDARW.
                   5')-CYTIDYLYL-(3'.FWDARW.5')-URIDYLYL-(3'.FWDARW.5')-, CYCLI
                   C NUCLEOTIDE/CN
E100
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), N-BENZOYL-2'-O-((1,1
                   -DIMETHYLETHYL) DIMETHYLSILYL) -5'-O-((4-METHOXYPHENYL) DIPHENY
                   LMETHYL) -, P,P'-BIS(2-(4-NITROPHENYL)ETHYL) ESTER, ESTER WIT
                   H N-BENZOYL-2'-O-((1/CN
E101
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), N-BENZOYL-5'-O-(BIS(
                   4-METHOXYPHENYL)PHENYLMETHYL)-2'-DEOXY-, P.P'-BIS(4-CHLOROPH
                   ENYL) ESTER, 5'-ESTER WITH N-BENZOYL-3'-O-(BIS(4-METHOXYPHEN
                   YL) PHENYLMETHYL) -2'-/CN
E102
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.3'-ESTER W
                   ITH ADENOSINE/CN
E103
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                   ITH 2'-DEOXY-3'-ADENYLIC ACID/CN
                  ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
E104
             1
                  ITH 2'-DEOXY-3'-CYTIDYLIC ACID/CN
E105
            1
                  ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
```

```
ITH 3'-ADENYLIC ACID/CN
E106
                    ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                   ITH 3-(AMINOCARBONYL)-1-B-D-RIBOFURANOSYLPYRIDINIUM/CN
E107
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                   ITH ADENOSINE/CN
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
E108
             1
                   ITH ADENOSINE CYCLIC 2',3'-(HYDROGEN PHOSPHATE)/CN
=> E
E109
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                   ITH ADENOSINE, DISODIUM SALT/CN
E110
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                   ITH ADENYLYL-(2'.FWDARW.5')-ADENOSINE/CN
E111
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                   TTH CYTIDINE/CN
E112
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                   ITH THYMIDINE/CN
E113
             1
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
                    ITH URIDINE/CN
E114
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), P-(2-CHLOROPHENYL)-2
                    '-DEOXY-N-(4-METHOXYBENZOYL)-5'-O-((4-METHOXYPHENYL)DIPHENYL
                   METHYL) CYTIDYLYL-(3'.FWDARW.5')-P-(2-CHLOROPHENYL)-2'-DEOXY-
                    N-(4-METHOXYBENZOYL)/CN
E115
                   ADENOSINE 3'-(TRIHYDROGEN DIPHOSPHATE), THYMIDYLYL-(3'.FWDAR
                    W.5')-THYMIDYLYL-(3'.FWDARW.5')-2'-DEOXYGUANYLYL-(3'.FWDARW.
                    5')-2'-DEOXYGUANYLYL-(3', FWDARW, 5')-THYMIDYLYL-(3', FWDARW, 5'
                    )-THYMIDYLYL-(3'.FWD/CN
                   ADENOSINE 3'-(TRIHYDROGEN PYROPHOSPHATE)/CN
E116
E117
             1
                   ADENOSINE 3'-(TRIHYDROGEN PYROPHOSPHATE), 3'.FWDARW.5'-ESTER
                    WITH CYTIDINE/CN
E118
                   ADENOSINE 3'-(TRIHYDROGEN PYROPHOSPHATE), DIAMMONIUM SALT/CN
                   ADENOSINE 3'-ACETATE 5'-PHOSPHATE/CN
E119
E120
                   ADENOSINE 3'-DIPHOSPHATE/CN
=> E
E121
             1 ADENOSINE 3'-DIPHOSPHATE 5'-MONOPHOSPHATE/CN
1 ADENOSINE 3'-DIPHOSPHATE 5'-PHOSPHATE/CN
E122
E123
                  ADENOSINE 3'-DIPHOSPHATE 5'-TRIPHOSPHATE/CN
                 ADENOSINE 3'-METHYL PHOSPHATE/CN
ADENOSINE 3'-MONOPHOSPHATE/CN
ADENOSINE 3'-MONOPHOSPHATE-8-3H/CN
E124
E125
E126
                  ADENOSINE 3'-NITRATE 5'-PHOSPHATE/CN
E127
E128
                  ADENOSINE 3'-O-METHYL PHOSPHATE/CN
E129
                  ADENOSINE 3'-PHOSPHATE/CN
E130
             1
                  ADENOSINE 3'-PHOSPHATE 5'-DIPHOSPHATE/CN
E131
                  ADENOSINE 3'-PHOSPHATE 5'-PHOSPHOSULFATE/CN
E132
                  ADENOSINE 3'-PHOSPHATE 5'-PHOSPHOSULFATE REDUCTASE/CN
=> S E125
L4
             1 "ADENOSINE 3'-MONOPHOSPHATE"/CN
=> D L4
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
    84-21-9 REGISTRY
RN
ED
     Entered STN: 16 Nov 1984
CN
     3'-Adenylic acid (CA INDEX NAME)
OTHER NAMES:
CN
    3'-AMP
CN
    Adenosine 3'-(dihydrogen phosphate)
CN Adenosine 3'-monophosphate
CN Adenosine 3'-phosphate
```

```
CN NSC 210570
CN Synadenylic acid
FS STEREOSEARCH
MF C10 H14 N5 07 P
CI COM
CL STM Files: AGRICOLA, ANABSTR, BEILSTEIN*
```

C STN Files: AGRICOLA, ANABSTR, BELLSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL, USPATOLD

(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

930 REFERENCES IN FILE CA (1907 TO DATE)

23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

930 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> E adenosine 2/CN
E1
                   ADENOSINE 1-OXIDE 5'-MONOPHOSPHATE/CN
                  ADENOSINE 1-OXIDE 5'-TRIPHOSPHATE/CN
E3
             0 --> ADENOSINE 2/CN
E4
             1
                  ADENOSINE 2',3',5'-TRIACETATE, RHODIUM COMPLEX/CN
E5
                  ADENOSINE 2',3',5'-TRINITRATE/CN
                  ADENOSINE 2',3'-CYCLIC MONOPHOSPHATE SODIUM SALT/CN
E7
                  ADENOSINE 2',3'-CYCLIC PHOSPHATE/CN
E8
                  ADENOSINE 2',3'-CYCLIC PHOSPHATE 5'-PHOSPHOSULFATE/CN
             1
E9
                  ADENOSINE 2',3'-CYCLIC PHOSPHATE SODIUM SALT/CN
             1
                  ADENOSINE 2'.3'-DIACETATE 5'-PHOSPHATE/CN
E10
             1
E11
                   ADENOSINE 2', 3'-DIPHOSPHATE/CN
                   ADENOSINE 2',3'-PHOSPHATE (CYCLIC), COMPD. WITH NICOTINAMIDE
             1
                   /CN
=> E
E13
                  ADENOSINE 2', 3'-PHOSPHATE, (CYCLIC), COMPD. WITH BU3N/CN
E14
                  ADENOSINE 2',5'(OR 3',5')-DIPHOSPHATE/CN
E15
             1
                  ADENOSINE 2',5'-BISPHOSPHATE/CN
E16
             1
                  ADENOSINE 2',5'-CYCLIC MONOPHOSPHATE/CN
E17
             1
                  ADENOSINE 2',5'-DINITRATE 3'-PHOSPHATE/CN
E18
             1
                  ADENOSINE 2',5'-DIPHOSPHATE/CN
            1
E19
                 ADENOSINE 2'-(DIHYDROGEN PHOSPHATE)/CN
E20
             1
                  ADENOSINE 2'-(PENTAHYDROGEN TETRAPHOSPHATE), ADENYLYL-(2'.FW
```

		DARW.5')-, P'''.FWDARW.5'-ESTER WITH ADENOSINE/CN
E21	1	ADENOSINE 2'-(PENTAHYDROGEN TETRAPHOSPHATE), ADENYLYL-(2'.FW
	-	DARW.5')-ADENYLYL-(2'.FWDARW.5')-, P'''.FWDARW.5'-ESTER WITH
		ADENOSINE/CN
E22	1	ADENOSINE 2'-(PENTAHYDROGEN TETRAPHOSPHATE), ADENYLYL-(2'.FW
	-	DARW.5')-ADENYLYL-(2'.FWDARW.5')-ADENYLYL-(2'.FWDARW.5')-, P
		'''.FWDARW.5'-ESTER WITH ADENOSINE/CN
E23	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE)/CN
E24	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), 3'-DEOXY-/CN
	-	ADDROGATE E (IEITAILEMOGEN INTERIOREMITE), O DECENT / CA
=> E		
E25	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), 3'-DEOXY-3'-FLUOR
223	-	O-/CN
E26	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), 5'-(TETRAHYDROGEN
220	_	TRIPHOSPHATE) /CN
E27	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), ADENYLYL-(2'.FWDA
527	1	RW.5')-/CN
E28	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), ADENYLYL-(2'.FWDA
E20	1	RW.5')-ADENYLYL-(2'.FWDARW.5')-/CN
E29	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), ADENYLYL-(2'.FWDA
E29	1	RW.5')-ADENYLYL-(2'.FWDARW.5')-, P''.FWDARW.5'-ESTER WITH AD
E30	1	ENOSINE/CN ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), ADENYLYL-(2'.FWDA
ESU	1	
722	1	RW.5')-ADENYLYL-(2'.FWDARW.5')-ADENYLYL-(2'.FWDARW.5')-/CN
E31	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), ADENYLYL-(2'.FWDA
		RW.5')-ADENYLYL-(2'.FWDARW.5')-ADENYLYL-(2'.FWDARW.5')-ADENY
	_	LYL-(2'.FWDARW.5')-/CN
E32	1	ADENOSINE 2'-(TETRAHYDROGEN TRIPHOSPHATE), MANGANESE SALT/CN
E33	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), 5'-(TRIHYDROGEN DIPH
	_	OSPHATE)/CN
E34	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), 5'-(TRIHYDROGEN DIPH
		OSPHATE), P'.FWDARW.5'-ESTER WITH 3-(AMINOCARBONYL)-1-B
		-D-RIBOFURANOSYLPYRIDINIUM, INNER SALT/CN
E35	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), 5'-O-(HYDROXY(METHYL
		THIO) PHOSPHINYL) ADENYLYL-(2'.FWDARW.5')-ADENYLYL-(2'.FWDARW.
		5')-3'-O-METHYL-/CN
E36	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), ADENYLYL-(2'.FWDARW.
		5')-ADENYLYL-(2'.FWDARW.5')-, P'.FWDARW.5'-ESTER WITH ADENOS
		INE/CN
_		
=> E	_	
E37	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
		ITH 2'-CYTIDYLIC ACID/CN
E38	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
	_	ITH ADENOSINE/CN
E39	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
		ITH CYTIDINE/CN
E40	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
		ITH THYMIDINE/CN
E41	1	ADENOSINE 2'-(TRIHYDROGEN DIPHOSPHATE), P'.FWDARW.5'-ESTER W
	_	ITH URIDINE/CN
E42	1	ADENOSINE 2'-(TRIHYDROGEN PYROPHOSPHATE)/CN
E43	1	ADENOSINE 2'-(TRIHYDROGEN PYROPHOSPHATE), ESTER WITH 10-(2,3
		, 4, 5-TETRAHYDROXYPENTYL) ISOALLOXAZINE/CN
E44	1	ADENOSINE 2'-ACETATE 5'-PHOSPHATE/CN
E45	1	ADENOSINE 2'-MONOPHOSPHATE/CN
E46	1	ADENOSINE 2'-MONOPHOSPHO-5'-DIPHOSPHORIBOSE/CN
E47	1	ADENOSINE 2'-PHOSPHATE/CN
E48	1	ADENOSINE 2'-PHOSPHATE 5'-DIPHOSPHATE RIBOSE/CN
=> S E45		
L5	1	"ADENOSINE 2'-MONOPHOSPHATE"/CN

```
=> D L5
```

```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
1.5
RN
    130-49-4 REGISTRY
ED
    Entered STN: 16 Nov 1984
     2'-Adenylic acid (CA INDEX NAME)
CN
OTHER NAMES:
    2'-AMP
CN
```

CN Adenosine 2'-(dihydrogen phosphate)

CN Adenosine 2'-monophosphate

CN Adenosine 2'-phosphate

FS STEREOSEARCH

DR 27082-34-4, 293738-05-3

ME C10 H14 N5 O7 P

CI COM T.C

STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, RTECS*, SPECINFO, TOXCENTER, USPATFULL, USPATOLD

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
630 REFERENCES IN FILE CA (1907 TO DATE)
```

31 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

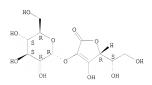
630 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> E ascorbyl 2-glucoside/CN
E1
                   ASCORBYL/CN
             1
                   ASCORBYL 2,6-DIPALMITATE/CN
             1
E3
             0 --> ASCORBYL 2-GLUCOSIDE/CN
                   ASCORBYL 6-LAURYLATE/CN
E4
             1
                   ASCORBYL 6-PALMITATE/CN
E5
             1
                   ASCORBYL 6-STEARATE/CN
E6
             1
E7
             1
                   ASCORBYL BEHENATE/CN
E8
                   ASCORBYL BENZOATE/CN
E9
                   ASCORBYL DECANOATE/CN
E10
             1
                   ASCORBYL DILAURATE/CN
E11
             1
                  ASCORBYL DIMYRISTATE/CN
                  ASCORBYL DIPALMITATE/CN
E12
             1
```

```
=> E ascorbyl glucoside/CN
E1
                   ASCORBYL DIPALMITATE/CN
             1
E2
             1
                   ASCORBYL GAMOLENATE/CN
EЗ
               --> ASCORBYL GLUCOSIDE/CN
E4
             1
                  ASCORBYL L-LACTATE/CN
E5
                  ASCORBYL LAURATE/CN
             1
                  ASCORBYL LINOLENATE/CN
             1
                  ASCORBYL MONOMYRISTATE/CN
                  ASCORBYL MONOPALMITATE/CN
E9
                  ASCORBYL MYRISTATE/CN
E10
             1
                  ASCORBYL OCTANOTE/CN
E11
             1
                   ASCORBYL PALMITATE/CN
E12
             1
                   ASCORBYL PALMITATE-A-TOCOPHERAMINE MIXTURE/CN
=> S E3
L6
             1 "ASCORBYL GLUCOSIDE"/CN
=> D L6
L6
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN
     129499-78-1 REGISTRY
ED
     Entered STN: 21 Sep 1990
CN
     L-Ascorbic acid, 2-O-α-D-glucopyranosyl- (CA INDEX NAME)
OTHER NAMES:
CN
     2-O-α-D-Glucopyranosyl-L-ascorbic acid
CN
     2-O-α-D-Glucosyl-L-ascorbic acid
CN
     AA 2G
CN
     Ascofresh
CN
     Ascorbyl glucoside
     L-Ascorbic acid 2-glucoside
CN
CN
     L-Ascorbic acid glucoside
FS
     STEREOSEARCH
DR
     768394-81-6, 577772-83-9, 1038931-06-4, 152452-81-8, 149614-94-8,
     189746-43-8, 286844-98-2, 334667-58-2, 340136-52-9, 446287-26-9
MF
     C12 H18 O11
ĊI
     COM
SR
     CA
LC
     STN Files:
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT,
       CHEMCATS, CHEMLIST, MEDLINE, PROUSDDR, TOXCENTER, USPAT2, USPATFULL
```

(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

513 REFERENCES IN FILE CA (1907 TO DATE) 10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

515 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE MEDICINE

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 57.43 60.29

FULL ESTIMATED COST

FILE 'ADISCTI' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'ADISINSIGHT' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'ADISNEWS' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'BIOSIS' ENTERED AT 11:41:12 ON 05 MAY 2009 Copyright (c) 2009 The Thomson Corporation

FILE 'BIOTECHNO' ENTERED AT 11:41:12 ON 05 MAY 2009
COPYRIGHT (C) 2009 Elsevier Science B.V., Amsterdam, All rights reserved.

FILE 'CAPLUS' ENTERED AT 11:41:12 ON 05 MAY 2009 USE IS SUBJECT TO THE TERMS OF YOUR SIN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DDFB' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DDFU' ACCESS NOT AUTHORIZED

FILE 'DGENE' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DISSABS' ENTERED AT 11:41:12 ON 05 MAY 2009
COPYRIGHT (C) 2009 ProQuest Information and Learning Company; All Rights Reserved.

FILE 'DRUGB' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DRUGMONOG2' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'DRUGU' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'EMBAL' ENTERED AT 11:41:12 ON 05 MAY 2009 Copyright (c) 2009 Elsevier B.V. All rights reserved.

FILE 'EMBASE' ENTERED AT 11:41:12 ON 05 MAY 2009
Copyright (c) 2009 Elsevier B.V. All rights reserved.

FILE 'ESBIOBASE' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'IFIPAT' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 IFI CLAIMS(R) Patent Services (IFI)

FILE 'IMSDRUGNEWS' ENTERED AT 11:41:12 ON 05 MAY 2009

COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'IMSPRODUCT' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'IPA' ENTERED AT 11:41:12 ON 05 MAY 2009 Copyright (c) 2009 The Thomson Corporation

FILE 'KOSMET' ENTERED AT 11:41:12 ON 05 MAY 2009

COPYRIGHT (C) 2009 International Federation of the Societies of Cosmetics Chemists

FILE 'LIFESCI' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Cambridge Scientific Abstracts (CSA)

FILE 'MEDLINE' ENTERED AT 11:41:12 ON 05 MAY 2009

FILE 'NAPRALERT' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Board of Trustees of the University of Illinois, University of Illinois at Chicago.

FILE 'NLDB' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Gale Group. All rights reserved.

FILE 'NUTRACEUT' ENTERED AT 11:41:12 ON 05 MAY 2009 Copyright 2009 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PASCAL' ENTERED AT 11:41:12 ON 05 MAY 2009
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2009 INIST-CNRS. All rights reserved.

FILE 'PCTGEN' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 WIPO

FILE 'PHARMAML' ENTERED AT 11:41:12 ON 05 MAY 2009
Copyright 2009 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PHIN' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 Informa UK Ltd.

FILE 'SCISEARCH' ENTERED AT 11:41:12 ON 05 MAY 2009 Copyright (c) 2009 The Thomson Corporation

FILE 'TOXCENTER' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USGENE' ENTERED AT 11:41:12 ON 05 MAY 2009 COPYRIGHT (C) 2009 SEQUENCEBASE CORP

FILE 'USPATFULL' ENTERED AT 11:41:12 ON 05 MAY 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 11:41:12 ON 05 MAY 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 11:41:12 ON 05 MAY 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

=> S 129499-78-1/RN
'RN' IS NOT A VALID FIELD CODE

```
NUMERIC VALUE NOT VALID '129499-78-1'
'RN' IS NOT A VALID FIELD CODE
L7
           649 129499-78-1/RN
=> S L7 and (61-19-8/RN or 84-21-9/RN or 130-49-4/RN)
'RN' IS NOT A VALID FIELD CODE
NUMERIC VALUE NOT VALID '61-19-8'
NUMERIC VALUE NOT VALID '84-21-9'
NUMERIC VALUE NOT VALID '130-49-4'
'RN' IS NOT A VALID FIELD CODE
```

=> D L8 1-8 IBIB ABS

L8 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:173888 CAPLUS

DOCUMENT NUMBER: 146:212282

TITLE: Agent for enhancing collagen production and

utilization of the same

INVENTOR(S): Miyata, Satomi; Ushio, Shimpei; Iwaki, Kanso; Miyake,

Toshio

PATENT ASSIGNEE(S): Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo,

Japan

SOURCE: PCT Int. Appl., 46pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA'	TENT :	NO.			KIN	D	DATE			APPI	ICAT	ION	NO.		1	DATE	
	WO	2007	0181	24		A1		2007	0215		WO 2	2006-	JP31	5410			2006	0803
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ	, CA	, CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ	, GB	, GD,
			GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM	, KN	, KP,
			KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG	, MK	, MN,
			MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO	, RS	, RU,
			SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ	, UA	, UG,
			US,	UZ,	VC,	VN,	ZA,	ZM,	zw									
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR	, HU	, IE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	, BF	, BJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	, BW	, GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM	, AZ	, BY,
			KG,	KZ,	MD,	RU,	TJ,	$^{\text{TM}}$										
	EP	1932	530			A1		2008	0618		EP 2	2006-	7822	70			2006	0803
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR	, HU	, IE,
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK	, TR	
	KR	2008	0348	90		A		2008	0422		KR 2	-8009	7017	05			2008	0122
	CN	1012	3289	1		A		2008	0730		CN 2	2006-	8002	8198			2008	0131
	US	2009	0110	671		A1		2009	0430		US 2	-800	6356	3			2008	0211
PRIO	RIT	Y APP	LN.	INFO	. :						JP 2	2005-	2326	79		A :	2005	0811
											WO 2	2006-	JP31	5410		W :	2006	0803
AB	Ιt	is i	nten	ded	to p	rovi	de a	mea	ns e	xert	ing	a pr	olon	ged (effe	ct	of e	nhancin

AB It is intended to provide a means exerting a prolonged effect of enhancing the production of collagen. This object can be achieved by an agent for enhancing collagen production which contains, as the active ingredient, α, α -trehalose and/or a sugar derivative of

 α, α -trehalose, or a composition for enhancing collagen production which contains the agent for enhancing collagen production as described above. REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE REPORMAT

L8 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:656036 CAPLUS DOCUMENT NUMBER: 145:109781

TITLE: Solid oil-in-water emulsions containing biologically

active electrolytes
INVENTOR(S): Shinohara, Shigeo; Harano, Fumiki; Tsujimoto, Shinji;

Saeki, Isamu

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A1 20060706 WO 2005-JP23865 20051227 WO 2006070789 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU. ZA. ZM. ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, KG, KZ, MD, RU, TJ, TM 20060713 JP 2004-381162 20060706 AU 2005-320616 20060706 CA 2005-2590928 20071010 EP 2005-822499 20060713 JP 2006182746 A 20041228 A1 AU 2005320616 20051227 CA 2590928 A1 20051227 EP 1842522 A1 20051227 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR A 20071226 CN 2005-80045327 CN 101094645 A 20070817 IN 2007-DN4618 A1 20071206 US 2007-722965 IN 2007DN04618 20070615 20070627 20070628 PRIORITY APPLN. INFO.: A 20041228 WO 2005-JP23865 W 20051227

Disclosed is a solid composition consisting of an oil-in-water emulsion that has satisfactory hardness, ensuring excellent feeling upon use and is capable of satisfactory expression of the physiol. functions of electrolytes. The solid composition can be obtained by preparing an

oil-in-water

emulsion through combining together of solid oils, liquid oils, surfactants, polyhydric alcs., electrolytes, and water. For example, lipsticks contained paraffin oil 13.5, 2-hexyldecyl isostearate 13, methylpolysiloxane 0.5, candelilla wax 13.5, hydrogenated jojoba oil 8, lipophilic glycerin monostearate 3, stearyl glycyrrhetinate 0.1, ethoxylated hydrogenated castor oil 0.5, maltitol hydroxyalkyl ether 3, decaglyceryl monostearate 1, sodium N-stearoyl-L-glutamate 0.5, glycerin 16, 1,3-butylene glycol 6, ascorbic acid 2-glucoside 2, disodium AMP 3, and distilled water balance to 100 %.

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 10 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L8 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
```

ACCESSION NUMBER: 2005:1173832 CAPLUS

DOCUMENT NUMBER: 143:426980

TITLE: Skin compositions containing Punica granatum flower

extracts

INVENTOR(S): Yamahara, Joji
PATENT ASSIGNEE(S): Sakamoto Yakusoen Y. K., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF Patent DOCUMENT TYPE:

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. NINU U...

JP 2005306831 A 20051104 JP 2004-151064 20040420

JP 2004-151064 20040420

JP 2004-151064 20040420 PRIORITY APPLN. INFO.:

AB The invention provides a skin composition characterized by containing Punica granatum flower extract as fibroblast-derived elastase inhibitor, wherein the composition has anti-aging and skin-lightening effect. Skin compns. containing further specified components are also disclosed. For example, a skin lotion containing Punica granatum flower extract 1, glycerin 3, 1,3-butylene glycol 2, polyethylene glycol 2, ethanol 5, Me paraben 0.1, xanthan gum 0.1, citric acid 0.01, sodium citrate 0.03, trimethylglycine 1, and water balance to 100 % was formulated.

L8 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:993109 CAPLUS

DOCUMENT NUMBER: 141:415634

TITLE: Skin compositions containing anti-aging peptides and

polyhydric alcohols

INVENTOR(S): Hirano, Nobuvuki; Adachi, Katsuvoshi; Tada, Takahiro;

Ito, Shiho; Aramaki, Kaname

Mikimoto Pharmaceutical Co., Ltd., Japan; Toshin PATENT ASSIGNEE(S):

Kagaku Co., Ltd. Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

SOURCE:

PATENT NO. KIND DATE APPLICATION NO. JP 2004323401 A 20041118 JP 2003-118442 20030423 RITY APPLN. INFO:: JP 2003-118442 20030423 PRIORITY APPLN. INFO.:

AB The invention relates to a skin composition containing Glu-Glu-Met-Gln-Arg-Arg peptide and polyhydric alc. having ≥2 OH groups, wherein the composition shows improved effect of the peptide. Skin compns. containing the hexapeptide, polyhydric alcs., and other active components are also disclosed. A cosmetic lotion containing Glu-Glu-Met-Gln-Arq-Arq peptide

solution (Argireline solution) 10, glycerin 10, Me paraben 0.2, and water balance to 100% was formulated.

L8 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:695458 CAPLUS

DOCUMENT NUMBER: 141:230304

TITLE: Skin moisturizing, lightening, and antiaging cosmetics and (quasi)drugs containing shellfish collagens type I

(a1)3 INVENTOR(S): Tada, Takahiro; Tsuji, Nobuhide; Adachi, Katsuyoshi

Mikimoto Pharmaceutical Co., Ltd., Japan PATENT ASSIGNEE(S):

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF DOCUMENT TYPE: Pat.ent.

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2004238386 A 20040826 JP 2003-118440 20030423 JP 2002-358821 A 20021211 PRIORITY APPLN. INFO.:

AB Cosmetics and (quasi)drugs contain (derivs. of) shellfish collagen type I $(\alpha 1)$ 3 and skin moisturizers, softening agents, cell activators, anti-inflammatory agents, antioxidants, circulation promoters, and/or

skin-lightening agents. Thus, a liquid cosmetic was formulated containing pearl

oyster collagen type I $(\alpha 1)3$ and Na hyaluronate.

ANSWER 6 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:162578 CAPLUS DOCUMENT NUMBER: 140:187005

TITLE: Antiaging compositions containing ascorbates and adenylic acids

INVENTOR(S): Wakamatsu, Kosaburo; Harano, Fumiki; Koba, Takashige;

Shinohara, Shigeo Otsuka Pharmaceutical Co., Ltd., Japan PATENT ASSIGNEE(S):

PCT Int. Appl., 29 pp. SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA:	TENT :	NO.			KIN	D	DATE			APP	LIC	ATI	ION	NO.		Е	ATE	
MO	2004	0162	3.8		A1	-	2004	0226			200	3	1007	83		2	0030	801
110							IN,					, ,	,,,,	05		-	.0050	001
							CZ,					s,	FI,	FR,	GB,	GR,	HU,	IE,
		IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK	, TI	R						
JP	2004	0675	76		A		2004	0304		JΡ	200	2-2	2283	68		2	0020	806
JP	4129	574			B2		2008	0806										
CA	2493	496			A1		2004	0226		CA	200	3-2	2493	496		2	0030	801
AU	2003	2523	12		A1		2004	0303		AU	200	3-2	2523	12		2	0030	801
EP	1547	577			A1		2005	0629		EΡ	200	3-1	7880	27		2	0030	801
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE	, н	U,	SK					
BR	2003	0132	74		A		2005	0705		BR	200	3-1	1327	4		2	0030	801
CN	1674	863			A		2005	0928		CN	200	3-8	3189	67		2	0030	801
IN	2005	DN00	392		A		2008	1205		IN	200	5-I	N39	2		2	0050	202
US	2005	0250	710		A1		2005	1110		US	200	5-5	236	05		2	0050	204
ORIT	Y APP	LN.	INFO	. :						JP	200	2-2	2283	68		A 2	0020	806
										WO	200	3 – 3	TP97	83	1	vi 2	0030	801

It is intended to provide an antiaging composition by which skin aging can be effectively retarded and, in particular, skin pigmentation can be improved. It is also intended to provide a method of potentiating the antiaging effect of ascorbic acid or its analog. Namely, an antiaging composition characterized by containing (A) at least one member selected from

the

group consisting of ascorbic acid, its derivs. and salts thereof; and (B) a purine nucleic acid-related substance. A method of using (A) at least one member selected from the group consisting of ascorbic acid, its derivs, and salts thereof together with (B) a purine nucleic acid-related substance to thereby potentiate the antiaging effect of the component A. For example, a lotion contained AMP 2, ascorbic acid 2-glucoside 2, 1,3-butylene glycol 2, concentrated glycerin 2, polyoxyethylene sorbitan monolaurate 1, ethanol 5, preservatives q.s., pH modifiers to pH 6.5, and

distilled water balance to 100 %. REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ACCESSION NUMBER: 1995:703456 CAPLUS

DOCUMENT NUMBER: 123:93348
ORIGINAL REFERENCE NO.: 123:16473a,16476a

TITLE: L-Ascorbate preparations for intracerebral

administration

INVENTOR(S): Miwa, Nobuhiko; Ito, Shinobu; Ogata, Eiji

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07126162	A	19950516	JP 1993-270901	19931028
US 5869525	A	19990209	US 1996-647767	19960515
PRIORITY APPLN. INFO.:			JP 1993-270901 A	19931028

The prepns., for intracerebral administration, contain ≥ 1 kinds of L-ascorbates, having forms showing stable activity, and ≥ 1 kinds of blood-brain barrier-opening agents. The prepns. are useful for treatment of schizophrenia, medicinal poisoning, Down's syndrome, Parkinson disease, depression, ischemia-reperfusion injury, etc. Neuronal death of jirds (carotid occlusion models for ischemia) was significantly prevented by i.v. administration of 200 μL of an injection containing 40 μM L-ascorbic acid 2-phosphate Mg salt and 10% glucose for 5 days.

L8 ANSWER 8 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2007:321655 USPATFULL

TITLE: Solid Oil-In-Water Emulsion
INVENTOR(S): Shinohara, Shigeo, Shiga, JAPAN
Harano, Fumiki, Shiga, JAPAN

Tsujimoto, Shinji, Osaka, JAPAN Saeki, Isamu, Osaka, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20070280979	A1	20071206	
APPLICATION INFO.:	US 2005-722965	A1	20051212	(11)
	WO 2005-JP23865		20051212	
			20070627	PCT 371 date

NUMBER	DATE

PRIORITY INFORMATION: JP 2004-381162 DOCUMENT TYPE: Utility

FILE SEGMENT: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP,

901 NEW YORK AVENUE, NW, WASHINGTON, DC, 20001-4413, US
NUMBER OF CLAIMS: 13

20041228

NUMBER OF CLAIMS: 13 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s) LINE COUNT: 793

LINE COUNT: /93

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

B The present invention aims to provide solid compositions comprising an oil-in-water emulsion that have sufficient hardness and good feel when used, and can sufficiently exhibit the physiological functions of an electrolyte. A solid composition is obtained by preparing an oil-in-water emulsion by combining a solid oil (A), a liquid oil (B), a surfactant (C), a polyhydric alcohol (D), an electrolyte (E), and water (F).

```
=> S (62624-30-0/RN or 50-81-7/RN) and (61-19-8/RN OR 84-21-9/RN OR 130-49-4/RN)
'RN' IS NOT A VALID FIELD CODE
NUMERIC VALUE NOT VALID '62624-30-0'
NUMERIC VALUE NOT VALID '50-81-7'
NUMERIC VALUE NOT VALID '61-19-8'
NUMERIC VALUE NOT VALID '84-21-9'
NUMERIC VALUE NOT VALID '130-49-4'
'RN' IS NOT A VALID FIELD CODE
L9
           255 (62624-30-0/RN OR 50-81-7/RN) AND (61-19-8/RN OR 84-21-9/RN OR
               130-49-4/RN)
=> S L9 and pd<2005
   5 FILES SEARCHED...
'2005' NOT A VALID FIELD CODE
'2005' NOT A VALID FIELD CODE
'2005' NOT A VALID FIELD CODE
  15 FILES SEARCHED ...
'2005' NOT A VALID FIELD CODE
  22 FILES SEARCHED...
'2005' NOT A VALID FIELD CODE
  27 FILES SEARCHED...
'2005' NOT A VALID FIELD CODE
  31 FILES SEARCHED...
           136 L9 AND PD<2005
=> DUP REM L10
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L10
            133 DUP REM L10 (3 DUPLICATES REMOVED)
```

=> S L11 and (topical or skin or dermatol?) 25 FILES SEARCHED...

15 L11 AND (TOPICAL OR SKIN OR DERMATOL?)

=> D L12 1-15 IBIB ABS

L12 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

2004:993109 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:415634

TITLE: Skin compositions containing anti-aging

peptides and polyhydric alcohols

INVENTOR(S): Hirano, Nobuyuki; Adachi, Katsuyoshi; Tada, Takahiro;

Ito, Shiho; Aramaki, Kaname

PATENT ASSIGNEE(S): Mikimoto Pharmaceutical Co., Ltd., Japan; Toshin

Kagaku Co., Ltd.

Jpn. Kokai Tokkyo Koho, 11 pp. SOURCE:

CODEN: JKXXAF DOCUMENT TYPE: Patent.

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004323401	A	20041118	JP 2003-118442	20030423 <
PRIORITY APPLN. INFO.:			JP 2003-118442	20030423
AD The investion relat		-1-1	Address of the Annual Control of the Annual	

AB The invention relates to a skin composition containing Glu-Glu-Met-Gln-Arg-Arg peptide and polyhydric alc. having ≥2 OH

groups, wherein the composition shows improved effect of the peptide. Skin compns. containing the hexapeptide, polyhydric alcs., and other active components are also disclosed. A cosmetic lotion containing

Glu-Glu-Met-Gln-Arg-Arg peptide solution (Argireline solution) 10, glycerin 10,

Me paraben 0.2, and water balance to 100% was formulated.

L12 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:795825 CAPLUS

DOCUMENT NUMBER: 142:169387

TITLE: Prophylactic administration of topical

glutamine enhances the capability of the rat colon to

resist inflammatory damage

AUTHOR(S): Israeli, Eran; Berenshtein, Eduard; Wengrower, Dov; Aptekar, Larisa; Kohen, Ron; Zajicek, Gershom; Goldin, Eran

CORPORATE SOURCE: Department of Gastroenterology, Hadassah University

Hospital and Hebrew University Medical School,

Jerusalem, Israel

SOURCE: Digestive Diseases and Sciences (2004), 49(10), 1705-1712

CODEN: DDSCDJ; ISSN: 0163-2116

Springer Science+Business Media, Inc. PUBLISHER:

DOCUMENT TYPE: Journal

LANGUAGE: English

Glutamine is an important nutrient for the GI tract and has been shown to exert a protective effect on the bowel. Nonetheless, in the context of inflammatory bowel disease (IBD), data demonstrating a therapeutic role for glutamine has been inconclusive. IBD is associated with oxidative stress caused by reactive oxygen species. We aimed to investigate the effect of topical glutamine administration in rats before or after induction of colitis by trinitrobenzenesulfonic acid. In study I glutamine enemas were given beginning 2 days before or on the same day of induction of colitis. Inflammation severity was assessed by macroscopic and

microscopic score and tissue myeloperoxidase activity. In study II glutamine enemas were given for 3 days without induction of colitis, and mitotic index and colonic crypt length were measured, as well as water-soluble low mol. weight antioxidants and energy-rich phosphate levels (by HPLC). Results showed that glutamine significantly decreased indexes of inflammation when administered before induction of colitis. Glutamine caused an increase in the mitotic index and the levels of water-soluble low mol. weight antioxidants and energy-rich phosphates. We conclude that glutamine exerts a beneficial effect only when administered before induction of colitis, by increasing the resistance of the colonic tissue to inflammatory injury. This effect is probably mediated by increasing the antioxidant capacity and energy level of the tissue.

39 L12 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:695458 CAPLUS

DOCUMENT NUMBER: 141:230304

TITLE: Skin moisturizing, lightening, and antiaging

cosmetics and (quasi)drugs containing shellfish

THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

collagens type I (a1)3 INVENTOR(S):

Tada, Takahiro; Tsuji, Nobuhide; Adachi, Katsuyoshi Mikimoto Pharmaceutical Co., Ltd., Japan PATENT ASSIGNEE(S):

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

REFERENCE COUNT:

PATENT NO. KIND DATE APPLICATION NO. DATE ----A 20040826 JP 2003-118440 20030423 <--JP 2002-358821 A 20021211 JP 2004238386 PRIORITY APPLN. INFO.: AB Cosmetics and (quasi)drugs contain (derivs. of) shellfish collagen type I

 $(\alpha 1)$ 3 and skin moisturizers, softening agents, cell activators, anti-inflammatory agents, antioxidants, circulation promoters, and/or skin-lightening agents. Thus, a liquid cosmetic was

formulated containing pearl oyster collagen type I (al) 3 and Na hvaluronate.

L12 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:162578 CAPLUS

DOCUMENT NUMBER: 140:187005

TITLE: Antiaging compositions containing ascorbates and

adenvlic acids Wakamatsu, Kosaburo; Harano, Fumiki; Koba, Takashige; INVENTOR(S):

Shinohara, Shigeo

Otsuka Pharmaceutical Co., Ltd., Japan PATENT ASSIGNEE(S):

SOURCE: DOCUMENT TYPE:

PCT Int. Appl., 29 pp. CODEN: PIXXD2

Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE		
						-												
WO	2004	0162	38		A1		2004	0226	1	WO 2	003-	JP97	83		2	0030	801	<
	W:	AU,	BR,	CA,	CN,	ID,	IN,	KR,	PH,	US								
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	
		IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR							

```
JP 2004067576 A 20040304 JP 2002-228368 20020806 <--
JP 4129574 B2 20080806
CA 2493496 A1 20040226 CA 2003-2493496 20030801 <--
A0 200322312 A1 20040230 AU 2003-252312 20030801 --
EP 1547577 A1 20050629 EP 2003-788027 20030801
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LIT, LU, NL, SE, MC, PT,
IE, SIT, FI, RO, CY, TR, BG, C2, EE, HU, SK
BR 2003013274 A 20050705 BR 2003-13274 20030801
CN 1674863 A 20050928 CN 2003-818967 20030801
IN 2005DN00392 A 20081205 IN 2005-DN392 20050202
US 20050250710 A1 2005111 US 2005-523605 A 20020806
PRIORITY APPLN. INFO::

JP 2002-228368 A 20020806
```

AB It is intended to provide an antiaging composition by which skin

aging can be effectively retarded and, in particular, skin pigmentation can be improved. It is also intended to provide a method of potentiating the antiaging effect of ascorbic acid or its analog. Namely, an antiaging composition characterized by containing (A) at least one member selected from the group consisting of ascorbic acid, its derivs. and salts thereof; and (B) a purine nucleic acid-related substance. A method of using (A) at least one member selected from the group consisting of ascorbic acid, its derivs. and salts thereof together with (B) a purine nucleic acid-related substance to thereby potentiate the antiaging effect of the component A. For example, a lotion contained AMP 2, ascorbic acid 2-qlucoside 2, 1,3-butylene glycol 2, concentrated glycerin 2, polyoxyethylene sorbitan monolaurate 1, ethanol 5, preservatives q.s., pH modifiers to pH 6.5, and distilled water balance to 100 %

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:585381 CAPLUS

DOCUMENT NUMBER: 133:182770

TITLE: Antiaging cosmetics containing tomato pigments INVENTOR(S): Uehara, Shizuka; Kameyama, Kumi; Kondo, Chiharu;

Takada, Norihisa

PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan; Nippon Delmonte K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000229827	A	20000822	JP 1999-28301	19990205 <
PRIORITY APPLN. INFO.:			JP 1999-28301	19990205
AB The cosmetics are	claimed	The tomato	nigments may mainly	comprise

NB The cosmetics are claimed. The tomato pigments may mainly comprise lycopene isolated by centrifugation of tomato prepns., microfiltration of the liquid parts, and collection of unfiltered substances by microfiltration. The cosmetics may addnl. contain active oxygen scavengers, antioxidants, inflammation inhibitors, UV shields, cell activators, and/or moisturizers. A cream containing the tomato pigment was used by volunteers to lighten skin and increase elasticity.

L12 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:41974 CAPLUS DOCUMENT NUMBER: 128:106245

ORIGINAL REFERENCE NO.: 128:20735a,20738a

TITLE: Skin-lightening and antiaging cosmetics

INVENTOR(S): Seiki, Hitoshi; Okano, Yuri

PATENT ASSIGNEE(S): NOEVIR Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. PATENT NO. JP 10007541 A 19980113 -----19980113 JP 1996-181321 19960620 <--JP 1996-181321 19960620

PRIORITY APPLN. INFO.:

AB Skin-lightening and antiaging cosmetics comprise: (A) lipoic acid and (B) compds. selected from vitamin A or its derivs., carotenes, riboflavin or its derivs., vitamin B6 or its salts or derivs., cobalamins, vitamin C or its salts or derivs., vitamin E or its derivs., vitamin K, adenosine or its derivs., flavonoids and tannins, in addition to other ingredients.

L12 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:731707 CAPLUS DOCUMENT NUMBER: 128:16289

ORIGINAL REFERENCE NO.: 128:3091a,3094a

Compositions for external use Kondo, Chiharu; Senoo, Masami INVENTOR(S): PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 09291011 A 19971111 JP 1996-19765 19960424 <--JP 1996-127955 PRIORITY APPLN. INFO.:

AB Compns. [cosmetics or topical prepns.] for external use comprise: (A) apple exts. and (B) tyrosinase inhibitors, active oxygen scavengers, antioxidants, cell activators, antiinflammatories and/or moisturizers. A skin-care and antiaging lotion contained glycerin 5.0, 1,3-butylene glycol 6.5, POE sorbitan monolaurate 1.2, ethanol 8.0, apple exts. 0.01, superoxide dismutase 0.01, preservatives, perfumes, and purified water to 100 %.

L12 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:491402 CAPLUS DOCUMENT NUMBER: 127:99538

ORIGINAL REFERENCE NO.: 127:19097a,19100a

Topical compositions

INVENTOR(S): Hoshino, Taku; Kondo, Chiharu; Senoo, Masami; Yamashita, Eiji

PATENT ASSIGNEE(S): Kosei K. K., Japan; Itano Reito K. K.

Jpn. Kokai Tokkyo Koho, 25 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Pat.ent.

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO.

19970603 JP 1995-326241 JP 09143063 JP 2006348035 A 19951122 <--20061228 A JP 2006-187127 20060706 JP 1995-326241 A3 19951122 PRIORITY APPLN. INFO.: AB Topical compns. for cosmetic or therapeutic use comprise (A)

astaxanthin and (B) active ingredients such as moisturizers, antioxidants and active oxygen removers. As an example, a cosmetic emulsion contained stearic acid 18.0, cetanol 4.0, triethanolamine 2.0, glycerin 5.0, astaxanthin 1.0, lactic acid 1.0, and purified water to 100%.

L12 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:89229 CAPLUS DOCUMENT NUMBER:

124:126879

ORIGINAL REFERENCE NO.: 124:23413a,23416a

TITLE:

Topical preparations containing Flor de

Manita extract and active oxygen scavengers,

antioxidants, or other biologically active substances Suzuki, Masayuki; Yanagisawa, Makiko; Hayashi, INVENTOR(S): Jpn. Kokai Tokkyo Koho, 23 pp.

Akinobu; Asai, Mariko

Dowa Mining Co., Japan; Kosei Kk PATENT ASSIGNEE(S):

SOURCE:

AB

DOCUMENT TYPE:

CODEN: JKXXAF Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07277939	A	19951024	JP 1994-89204	19940405 <
PRIORITY APPLN. INFO.:			JP 1994-89204	19940405

Topical prepns. contain Flor de Manita (Mexican plant) exts. and active oxygen scavengers, antioxidants, inflammation inhibitors, tyrosinase inhibitors and/or humectants. The prepns. showed marked cosmetic and antiaging activities. A cosmetic emulsion contained squalane 5.0, white petrolatum 2.0, beeswax 0.5, sorbitan sesquioleate 0.8, polyoxyethylene oleyl ether 1.2, 1,3-butylene glycol 5.0, Flor de Manita extract 0.1, $dl-\alpha$ -tocopherol 0.01, Et alc. 5.0, preservatives 0.2, perfumes 0.1, 2% xanthan gum 20.0, and purified water to 100 parts.

L12 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

1984:428111 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 101:28111

ORIGINAL REFERENCE NO.: 101:4373a,4376a

TITLE: Cosmetic preparations promoting the trophism of the skin and of the related hair follicles

INVENTOR(S): Gazzani, Giovanni

PATENT ASSIGNEE(S):

CRINOS Industria Farmacobiologica S.p.A., Italy

SOURCE: Eur. Pat. Appl., 15 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
EP 107885		A1	19840509	EP 1983-201530	19831025 <
EP 107885		B1	19870729		
R: AT,	BE, DE,	GB, NL	, SE		
AT 28561		T	19870815	AT 1983-201530	19831025 <
BR 8305952		A	19840605	BR 1983-5952	19831027 <
CH 655653		A5	19860515	CH 1983-5823	19831027 <

FR	2535201	A1	19840504	FR	1983-17274		19831028	<
FR	2535201	B1	19870703					
JP	59130207	A	19840726	JP	1983-201128		19831028	<
JP	63048244	В	19880928					
CA	1213522	A1	19861104	CA	1983-439958		19831028	<
IL	70086	A	19861231	IL	1983-70086		19831030	<
US	5053230	A	19911001	US	1987-133199		19871215	<
PRIORITY	Y APPLN. INFO.:			IT	1982-23994	Α	19821029	
				ΙT	1983-22047	A	19830713	
				EP	1983-201530	A	19831025	
				US	1983-545674	В1	19831025	

A cosmetic preparation consists of an efficacious amount of a nutrient medium for

the in vivo culture of isolated human epithelial cells and a related amount of borine fetus serum. The preparation is active as a revitalizing agent for the skin, as antiwrinkle agent and promotes hair growth. The activity of the nutrient medium comprising amino acids, vitamins, etc., is further enhanced by adding exts. from connective tissues of animal organs which containly mainly mucopolysaccharides. Thus, a powder nutrient medium was prepared containing various amino acids, vitamins, uracil and other materials. An antiwrinkle, moisturizing cream was prepared containing

the medium 0.4, serum of bovine fetus 2.5, polyethylene glycol stearate 5.0, stearin 6.5, lanolin oil 6, squalene 2, spermacetic 8, preservatives and perfume (small amount) and water to 100 g.

L12 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1955:25529 CAPLUS

DOCUMENT NUMBER: 49:25529

ORIGINAL REFERENCE NO.: 49:4945h-i,4946a

TITLE: Cosmetological investigation on the juices of fodder

plants. I. Composition and cutaneous action of alfalfa liquid

Rovesti, Paolo; Variati, Gian Luigi AUTHOR(S):

CORPORATE SOURCE: Lab. recherches inst. derives vegetaux, Milan

SOURCE: Industries Parfum. (1954), 9, 344-5

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

Twenty-five kq. of green liquid obtained from a quintal of alfalfa contained dry residue 14.2, crude protein 4.74, carbohydrates 3.12, fats 1.53, cellulose material in suspension 0.08, inorg. matter 4.92, CaCO3 0.82, P 0.31, Fe 0.032, and chlorophyll 0.07%, choline 490, vitamin E 192, vitamin K 750, riboflavine 8, ascorbic acid 25, thiamine 212, nicotinic acid 23, and pantothenic acid 19 mg., carotene 115,000 I.U., alanine 0.085, valine 0.120, leucine 0.091, serine 0.132, tyrosine 0.011, phenylalanine 0.028, arginine 0.252, lysine 0.060, and tryptophan 0.273%. The inorg. salts consisted of CaO 41.3, K2O 22.6, Na2O 1.9, MgO 4.8, SiO2 8.9, NaCl 2.9, H3PO4 8.2, and H2SO4 5.4%. Evaporation of the liquid gave 5.8 kg. of a stable powder containing crude protein 45.12, fats 4.1, inorg. salts 18.10, and extractable nitrogenous materials 30.52%. This product has beneficial cosmetic effects upon the skin.

L12 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1953:12861 CAPLUS

DOCUMENT NUMBER: 47:12861

ORIGINAL REFERENCE NO.: 47:2295a-e

TITLE: Some aspects of phosphorus metabolism in bone marrow. II. Changes in the content of phosphorus compounds and reducing substances in bone marrow and spleen, caused by ionizing radiation and other factors which depress the function of blood-forming tissue

Lutwak-Mann, Cecilia

AUTHOR(S):

CORPORATE SOURCE: Univ. Cambridge, UK

Biochemical Journal (1952), 52, 356-64 SOURCE: CODEN: BIJOAK; ISSN: 0264-6021

Journal DOCUMENT TYPE:

Unavailable LANGUAGE: AB cf. C.A. 46, 1124c. With suitably graded x-ray doses it was possible to produce a major breakdown of nucleic acid in the bone marrow and spleen without significantly affecting the lipide P content. The nucleic acid P is generally much more reactive than the lipide P towards a variety of agents. The changes in nucleic acid P were always accompanied by a fall

in the content of ascorbic acid (possibly also of glutathione, but this is not yet completely established). The decline in the ascorbic acid content of the bone marrow, and to a smaller extent of the spleen, results not only from irradiation but also from the action of chemically unrelated substances (mustard gas, aminopterin, or colchicine). Blood-forming tissue contains 3 reducing substances (ascorbic acid, glutathione, and ergothioneine). A high fat, carbohydrate-free diet, which is adequate in protein and total calories, but failed to support growth, induced profound though reversible changes in the nucleic acid and lipide P of the bone marrow. Arbitrarily, the stage 7 days after exposure to 600 r. x-rays has been chosen to establish the extent of recovery of nucleic acid P in the bone marrow and spleen. Treatment of the exptl. animals (rats) with muscle or yeast adenylic acid, before and after irradiation, indicated that these substances (but not inosinic acid) delay the recovery of nucleic acid P and ascorbic acid in bone marrow and spleen, nor was any effect noted as the result of mild burns of a limited skin area. The folic acid antagonists, aminopterin and amethopterin, selectively affected the bone marrow but not the spleen, and colchicine acted in a similar manner but to a smaller extent. Mustard sulfoxide potentiated by dimethyldithiocarbamate, like x-rays, acted on both bone marrow and spleen. Prolonged administration of amidopyrine had no marked effect on rat bone marrow or spleen.

L12 ANSWER 13 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:221921 USPATFULL

TITLE: Method for increasing hair growth

INVENTOR(S): Gan, David C., Huntington Sta., NY, UNITED STATES Hawkins, Geoffrey, Penn Valley, PA, UNITED STATES Mammone, Thomas, Farmingdale, NY, UNITED STATES

Presti, Richard, East Meadow, NY, UNITED STATES Sparacio, Rose Maire, Manorville, NY, UNITED STATES

DATE

MIND

NORDER	ICTIAD	DAIL		
US 20040171693 US 2004-786847	A1 A1	20040902 20040225	(10)	<

MILIMEDED

PRIORITY INFORMATION: US 2003-495915P 20030818 (60) US 2003-451193P 20030228 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

THE ESTEE LAUDER COS, INC, ATTN: KAREN A. LOWNEY, 125 LEGAL REPRESENTATIVE:

NUMBER DATE

PINELAWN ROAD, MELVILLE, NY, 11747 NUMBER OF CLAIMS:

EXEMPLARY CLAIM: LINE COUNT: 616

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a method for stimulating hair follicle growth, which comprises applying a composition containing a follicle stimulating effective amount of a creatine compound. The method can be used to treat and prevent conditions such as male pattern baldness, hair loss due to aging, or hair loss due to chemotherapy or drug exposure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 14 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2002:88231 USPATFULL

TITLE: Methods and compositions for assaying analytes INVENTOR(S): Yuan, Chong-Sheng, San Diego, CA, United States

PATENT ASSIGNEE(S): General Atomics, San Diego, CA, United States (U.S.

corporation)

NUMBER KIND DATE US 6376210 B1 20020423 US 1999-347878 19990706 PATENT INFORMATION: <--APPLICATION INFO.: 19990706 (9) DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Achutamurthy, Ponnathapu
ASSISTANT EXAMINER: Saidha, Tekchand LEGAL REPRESENTATIVE: Morrison & Foerster LLP NUMBER OF CLAIMS: 16

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Compositions and methods for assaying analytes, preferably, small molecule analytes. Assay methods that employ, in place of antibodies or molecules that bind to target analytes or substrates, modified enzymes, called substrate trapping enzymes. These modified enzymes retain binding affinity or have enhanced binding affinity for a target substrate or analyte, but have attenuated catalytic activity with respect to that substrate or analyte. The modified enzymes are also provided. In particular, a mutant S-adenosylhomocysteine (SAH) hydrolases, substantially retaining binding affinity or having enhanced binding affinity for Hcy or SAH but having attenuated catalytic activity, are provided. Also provided are methods, combinations, kits and articles of manufacture for assaying analytes, preferably small molecule analytes such as inorganic ions, amino acids (e.g., homocysteine), peptides, nucleosides, nucleotides, oligonucleotides, vitamins, monosaccharides (e.g., glucose), oligosaccharides, lipids (e.g., cholesterol), organic acids (e.g., folate species, bile acids and uric acids).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 15 OF 15 USPATFULL on STN

ACCESSION NUMBER: 91:79784 USPATFULL

TITLE: Cosmetic preparations for promoting trophism of the

skin and of related hair follicles INVENTOR(S):

Gazzani, Giovanni, Appiano Gentile, Italy PATENT ASSIGNEE(S): Crinos Industria Farmacobiologica S.p.A., Como, Italy

(non-U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: APPLICATION INFO.: US 5053230 19911001 US 1987-133199 19871215 (7) RELATED APPLN. INFO.: Continuation of Ser. No. US 1983-545674, filed on 25

Oct 1983, now abandoned

NUMBER DATE

PRIORITY INFORMATION: IT 1982-23944 19821029 IT 1983-22047 19830713

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rosen, Sam

LEGAL REPRESENTATIVE: McAulay Fisher Nissen Goldberg & Kiel

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1 LINE COUNT: 514

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

B A cosmetic preparation is described as comprising at least an effective amount of a nutrient medium for the in vitro culture of isolated human epithelial cells and a related amount of serum of bovine fetus. The preparation is particularly active as a revitalizing agent for the skin, as an anti-wrinkle agent and as a factor for enhancing hair growth. The activity of the aforesaid nutrient medium can be furthermore enhanced by adding extractive mixtures, obtained from the connective tissues of animal organs, mainly mucopolysaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
=> S (61-19-8/RN OR 84-21-9/RN OR 130-49-4/RN) and (skin (3w) (lighten? or whiten?
or depigment?))
'RN' IS NOT A VALID FIELD CODE
NUMERIC VALUE NOT VALID '61-19-8'
NUMERIC VALUE NOT VALID '84-21-9'
NUMERIC VALUE NOT VALID '130-49-4'
'RN' IS NOT A VALID FIELD CODE
L13
            13 (61-19-8/RN OR 84-21-9/RN OR 130-49-4/RN) AND (SKIN (3W) (LIGHTE
               N? OR WHITEN? OR DEPIGMENT?))
```

^{=&}gt; D L13 1-13 IBIB ABS KWIC

ACCESSION NUMBER: 2007:553554 CAPLUS

DOCUMENT NUMBER: 146:506934

TITLE: Liquid skin compositions stably containing

glutathione, and skin-whitening and skin-beautifying compositions

INVENTOR(S): Matsuda, Kosuke; Matsuda, Tomotake; Okuda, Yoshinori;

Iwasaki, Hiroyuki

PATENT ASSIGNEE(S): Vesubio K. K., Japan; Cosmetics Roland K. K.

SOURCE: Jpn. Tokkyo Koho, 14pp.

CODEN: JTXXFF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

LANGUAGE: J: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 3919123	B1	20070523	JP 2005-373497	20051226
JP 2007176798	A	20070712		
A CHARL MIGGE VETGOTO			TD 2005-272497	20051226

RIORITY APPLN. INFO.: JP 2005-373497

AB It is intended to provide a liquid skin composition containing glutathione, especially reduced glutathione, with improved storage stability of glutathione.

Disclosed is a liquid skin composition containing whey fraction, molasses fraction.

and glutathione, wherein the molasses fraction is obtained by extraction with an alc. or an alc./water mixture and decoloration thereof. A skin composition further containing carboxylic acid, skin-whitening component, and/or skin-beautifying agent is also disclosed. For example,

a skin composition containing glutathione 1, cattle colostrum whey fraction 5, active carbon-treated molasses ethanol extract 5, ascorbic acid, sodium ascorbate, and water balance to 100 % was formulated, and tested for the storace stability.

TI Liquid skin compositions stably containing glutathione, and skin -whitening and skin-beautifying compositions

AB . . . obtained by extraction with an alc. or an alc./water mixture and decoloration thereof. A skin composition further containing carboxylic acid, skin-whitening component, and/or skin-beautifying agent is also disclosed. For example, a skin composition containing qlutathione 1,

cattle colostrum whey fraction 5,. . . IT Phellodendron

(barks, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)
Rice

(bran, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

IT Fagus

(buds, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

T Chicken

Gallus gallus

(combs, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

IT Allium sativum

Asparagus

Asparagus officinalis

Bifidobacterium bifidum

Blood serum

Cassia nomame Chamomile

Coffea

Crataegus

```
Cydonia speciosa
Eucalyptus
Ficus awkeotsang
Ganoderma lucidum
Garlic
Ginkgo
Glycyrrhiza
Grape
Guava
Humulus lupulus
Lactic acid bacteria
Lilium longiflorum
Lycopersicon esculentum
Millettia reticulata
Molasses
Ononis spinosa
Paeonia lactiflora
Panax
Pea
Pisum sativum
Placenta
Psidium quajava
Raspberry
Rosa multiflora
Rosmarinus officinalis
Saxifraga
Seaweed
Siraitia grosvenorii
Sophora flavescens
Soybean products
Spleen
Swertia japonica
Tomato
Vitis vinifera
Whev
Yeast
Rosa rugosa
Inula japonica
```

(exts.; liquid skin compns. stably containing glutathione, and skin -whitening and skin-beautifying compns.)

Rosa

(flower buds, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

(flowers, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

(fruits, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

Triticum aestivum

(germ, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

Carboxylic acids, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hydroxy; liquid skin compns. stably containing glutathione, and skin -whitening and skin-beautifying compns.)

Arctostaphylos uva-ursi

Tea products (leaves, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.)

Cosmetics and personal care products

Royal jelly Skin-lightening cosmetics

Wrinkle-preventing cosmetics

(liquid skin compns. stably containing glutathione, and skinwhitening and skin-beautifying compns.) Carboxylic acids, biological studies Carotenes, biological studies DNA Hydroquinones Nucleic acids RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (liquid skin compns. stably containing glutathione, and skinwhitening and skin-beautifying compns.) Alcohols, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (molasses extraction solvent; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) TT Cicadidae (periostracum; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) ΙT Bran (rice, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) Acanthopanax (root barks, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) Ampelopsis japonica Asiasarum Scutellaria Sophora (roots, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) Bos taurus Capra hircus Cattle Colostrum Goat Human Ovis aries Sheep Sus scrofa domestica (whey exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) 7440-44-0, Activated carbon, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (activated, decoloratio of molasses exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) 83-75-0, Euguinine RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (coix, exts.; liquid skin compns. stably containing glutathione, and skin-whitening and skin-beautifying compns.) 50-81-7, Ascorbic acid, 50-21-5, Lactic acid, biological studies biological studies 50-81-7D, L-Ascorbic acid, alkyl esters Adenosine triphosphate, biological studies 61-19-8, Adenosine monophosphate, biological studies 69-72-7, Salicylic acid, biological

73-40-5, Guanine 79-14-1, Glycolic acid, biological studies 108-46-3, Resorcin, biological studies 110-15-6, Succinic acid, biological studies 134-03-2, Sodium ascorbate 331-39-5, Caffeic acid 463-40-1, α -Linolenic acid 481-49-2, Cepharanthin 497-76-7, Arbutin 506-26-3, γ -Linolenic acid 551-15-5, Liquiritin 1135-24-6,

70-18-8, Glutathione, biological studies

studies 69-89-6, Xanthine

Ferulic acid 5041-81-6, IsoLiquiritin 6915-15-7, Malic acid 9067-32-7, Sodium hyaluronate 10417-94-4, Eicosapentaenoic acid 56939-67-4D, derivs. 59870-68-7, Glabridin 60008-03-9, Glabrene 125913-31-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (liquid skin compns. stably containing glutathione, and skinwhitening and skin-beautifying compns.)

64-17-5, Ethanol, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(molasses extraction solvent; liquid skin compns. stably containing glutathione,

and skin-whitening and skin-beautifying compns.)

L13 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN 2006:823381 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 145:256151

TITLE.

Topical delivery of trace metals for enzyme modulation INVENTOR(S): Gupta, Shyam K.

PATENT ASSIGNEE(S): Bioderm Research, USA

SOURCE: U.S. Pat. Appl. Publ., 24pp., Cont.-in-part of U.S. Ser. No. 306,948.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060183708	A1	20060817	US 2006-308290	20060315
US 20040105894	A1	20040603	US 2002-306948	20021129
US 20070189992	A1	20070816	US 2007-676284	20070217
PRIORITY APPLN. INFO.:			US 2002-306948 A2	20021129
			US 2004-710011 A2	20040611
			US 2006-308290 A2	20060315

P GI

The present invention relates to a method for topical delivery of trace metals for the modulation of certain metalloenzymes. The method of topical delivery of the present invention comprises; (i) mixing of a trace metal salt of a phosphorylated nitrogen heterocyclic base complexed with a chelating agent (I), and (ii) a carrier, and (iii) topical application of said mixture The modulation of metalloenzymes such as Superoxide Dismutase, Elastase, Tyrosinase, Matrix metalloproteases, and Ubiquitin-Proteasome

pathway by the methods of the present invention is useful for providing anti-inflammatory, skin whitening, wrinkles reduction, skin aging control, cellular antioxidant, acne control, hair growth modulation, and skin damage control benefits.

AR . . Dismutase, Elastase, Tyrosinase, Matrix metalloproteases, and Ubiquitin-Proteasome pathway by the methods of the present invention is useful for providing anti-inflammatory, skin whitening , wrinkles reduction, skin aging control, cellular antioxidant, acne control, hair growth modulation, and skin damage control benefits.

Cosmetics

(skin-lightening; topical delivery of trace metals for enzyme modulation)

54-47-7, Pyridoxal-5-phosphate 56-65-5, Adenosine triphosphate, biological studies 56-81-5, Glycerin, biological studies 58-64-0, Adenosine diphosphate, biological studies 59-43-8D, Vitamin B1, phosphorylated derivs. 60-00-4, EDTA, biological studies 61-19-8 , Adenosine monophosphate, biological studies 64-17-5, Alcohol, biological studies 65-86-1, Orotic acid 70-18-8, Glutathione, 77-92-9, Citric acid, biological studies 98-98-6, 17-21-1, 1.2-Ethanediol, biological studies 111-90-0 biological studies Picolinic acid 107-21-1, 1,2-Ethanediol, biological studies 526-95-4, D-Gluconic acid 532-40-1, Thiamine phosphate 2163-42-0, Methylpropanediol 22457-89-2, Benfotiamine 25322-68-3, Polyethylene glycol 25618-55-7, Polyglycerol 59113-36-9, Diglycerol RL: COS (Cosmetic use): MOA (Modifier or additive use): THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(topical delivery of trace metals for enzyme modulation)

L13 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1173832 CAPLUS

DOCUMENT NUMBER: 143:426980 TITLE: Skin compositions containing Punica granatum flower

extracts INVENTOR(S): Yamahara, Joji

PATENT ASSIGNEE(S):

Sakamoto Yakusoen Y. K., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005306831 PRIORITY APPLN. INFO.:	A	20051104	JP 2004-151064 JP 2004-151064	20040420 20040420

AB The invention provides a skin composition characterized by containing Punica granatum flower extract as fibroblast-derived elastase inhibitor, wherein the composition has anti-aging and skin-lightening effect. Skin compons, containing further specified components are also disclosed. For

example, a skin lotion containing Punica granatum flower extract 1, glycerin 3, 1,3-butylene glycol 2, polyethylene glycol 2, ethanol 5, Me paraben 0.1, xanthan gum 0.1, citric acid 0.01, sodium citrate 0.03, trimethylglycine 1, and water balance to 100 % was formulated.

. . . a skin composition characterized by containing Punica granatum flower AR extract

as fibroblast-derived elastase inhibitor, wherein the composition has anti-aging and skin-lightening effect. Skin compns. containing further specified components are also disclosed. For example, a skin lotion containing Punica granatum flower extract. . .

Cosmetics

(skin-lightening; skin compns. containing punica granatum flower extract and other active components)

Chondroitin sulfate 9050-30-0 9056-36-4, Keratan sulfate 9067-. Sodium hyaluronate 10417-94-4, Eicosapentaenoic acid 11042-64-1,

γ-Orizanol 11103-57-4, Vitamin A 12001-76-2, Vitamin B 15307-79-6, Sodium diclofenac 15421-15-5, Potassium ascorbate 15431-40-0, Magnesium ascorbate 15687-27-1, Ibuprofen 22071-15-4,

9067-32-7.

Ketoprofen 24967-94-0, Dermatan sulfate 25013-16-5 25395-66-8, L-Ascorbyl stearate 28474-90-0, L-Ascorbyl dipalmitate 28518-50-5, L-Ascorbic acid monooleate 29710-31-4, Cetyl octanoate 32381-28-5, N.N'-Diacetylcystine dimethyl ester 35602-69-8, Cholesteryl stearate 36653-82-4, Cetanol 56939-67-4 59870-68-7, Glabridin 60008-03-9, Glabrene 74438-74-7, L-Ascorbic acid distearate 92353-27-0, L-Ascorbic acid dioleate 103000-77-7, Glycyrrhezinic acid 108910-78-7 110369-28-3 110369-30-7 110369-32-9 110369-35-2 110369-36-3 122715-02-0, α-Borneol 123638-49-3, Aluminum ascorbate 125913-31-7 128808-19-5 128808-20-8 128808-21-9 128808-22-0, L-Ascorbic acid sulfate sodium salt 128808-23-1 128808-24-2 128808-25-3 128808-26-4 129499-78-1, L-Ascorbic acid glucoside 138069-07-5 161436-56-2, L-Ascorbyl tetraisopalmitate 185323-25-5 404566-00-3, L-Ascorbic acid Isopalmitate 745794-24-5 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (skin compns. containing punica granatum flower extract and other active

L13 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:993109 CAPLUS

DOCUMENT NUMBER: 141:415634

TITLE: Skin compositions containing anti-aging peptides and

polyhydric alcohols

INVENTOR(S): Hirano, Nobuyuki; Adachi, Katsuyoshi; Tada, Takahiro;

Ito, Shiho; Aramaki, Kaname
PATENT ASSIGNEE(S): Mikimoto Pharmaceutical Co., Ltd., Japan; Toshin

Kagaku Co., Ltd.
SOURCE: Jpn. Kokai Tokkvo Koho, 11 pp.

Jpn. Kokai Tokkyo Koho, 11 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

components)

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004323401	A	20041118	JP 2003-118442	20030423
PRIORITY APPLN. INFO.:			JP 2003-118442	20030423

AB The invention relates to a skin composition containing Glu-Glu-Met-Gln-Arg-Arg peptide and polyhydric alc. having ≥2 OH groups, wherein the composition shows improved effect of the peptide. Skin compns. containing the hexapeptide, polyhydric alcs., and other active components are also disclosed. A cosmetic lotion containing Glu-Glu-Met-Gln-Arg-Arg peptide solution.

(Argireline solution) 10, glycerin 10, Me paraben 0.2, and water balance to 100% was formulated.

Cosmetics

(skin-lightening; skin compns, containing anti-aging

peptides and polyhydric alcs. with other defined active components)

T 50-21-5, Lactic acid, biological studies 50-28-2, Estradiol, biological
studies 50-33-9, Phenylbutazone, biological studies 50-70-4, Sorbitol,
biological studies 50-81-7, Ascorbic acid, biological studies 50-99-7,
Glucose, biological studies 51-35-4, Hydroxyproline 51-84-3,
Acetylcholine, biological studies 52-53-9, Verapamil 52-90-4, Cystein,
biological studies 53-86-1, Indomethacin 56-40-6, Glycrine, biological
studies 56-41-7, Alanine, biological studies 56-49-1, Serine,
biological studies 56-55-5, Adenosine triphosphate, biological studies
56-81-5, Glycerin, biological studies 56-84-8, Aspartic acid, biological
studies 56-85-9, Glutamine, biological studies 56-86-0, Glutamic acid,
biological studies 56-87-1, Lysine, biological studies 57-11-4,
Stearic acid, biological studies 57-13-6, Urea, biological studies
57-48-7, Fructose, biological studies 57-56, Propylene qlycol,

```
biological studies 57-88-5, Cholesterol, biological studies 58-08-2,
Caffeine, biological studies 58-55-9, Theophylline, biological studies
58-64-0, Adenosine diphosphate, biological studies 58-86-6, Xylose,
biological studies 59-98-3, Tolazoline 60-18-4, Tyrosine, biological
studies 60-32-2, E-Aminocaproic acid 60-92-4, Cyclic AMP
61-19-8, Adenosine monophosphate, biological studies 61-68-7,
Mephenamic acid 63-68-3, Methionine, biological studies 63-91-2,
Phenylalanine, biological studies 64-17-5, Ethanol, biological studies
65-71-4, Thymine 69-65-8, Mannitol 69-79-4, Maltose 69-89-6, Xanthin
70-18-8, Glutathione, biological studies 70-26-8, Ornithine 70-47-3,
Asparagine, biological studies 71-00-1, Histidine, biological studies
71-30-7, Cytosine 72-18-4, Valine, biological studies 72-19-5,
Threonine, biological studies 73-22-3, Tryptophan, biological studies
73-24-5, Adenine, biological studies 73-32-5, Isoleucine, biological
studies 73-40-5, Guanine 74-79-3, Arginine, biological studies
77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid,
biological studies 81-13-0, Panthenol 87-69-4, Tartaric acid,
biological studies 87-99-0, Xylitol 97-59-6, Allantoin 98-79-3,
Pyrrolidone carboxylic acid 99-20-7, Trehalose 107-43-7, Trimethyl
glycine 107-88-0, 1,3 Butylene glycol 108-46-3, 1,3-Benzenediol,
biological studies
                    110-15-6, Succinic acid, biological studies
110-27-0, Isopropyl myristate 111-01-3, Squalane 111-02-4, Squalene 112-85-6, Behenic acid 112-92-5, Stearyl alcohol 115-77-5,
Pentaerythritol, biological studies 122-48-5, Gingerone 123-31-9,
Hydroquinone, biological studies 128-37-0, Dibutylhydroxytoluene,
biological studies 137-66-6, L-Ascorbyl palmitate 142-18-7, Glyceryl
monolaurate 146-14-5 147-85-3, Proline, biological studies
                                                                 149-32-6.
Erythritol 149-91-7, Gallic acid, biological studies 298-57-7,
Cinnarizine 331-39-5 372-75-8, Citrulline 404-86-4, Capsaicine
456-59-7, Cyclandelate 463-40-1, α-Linolenic acid 481-49-2,
Cepharanthine 489-84-9, Guaiazulene 497-76-7, Arbutin 506-26-3,
γ-Linolenic acid 544-62-7, Batyl alcohol 544-63-8, Myristic
acid, biological studies 551-15-5, Liquiritin 585-88-6, Maltitol
593-31-7, Selachyl alcohol 1135-24-6, Ferulic acid 1190-94-9,
Hydroxylysine 1197-18-8, Tranexamic acid 1338-41-6, Sorbitan
monostearate 1405-86-3, Glycyrrhizinic acid 1406-16-2, Vitamin D
1406-18-4, Vitamin E 2444-46-4 2495-84-3, Ascorbyloleate 2568-33-4,
Isoprene glycol 3081-61-6, Theanine 5041-81-6, IsoLiquiritin
6556-11-2, Inositol hexanicotinate 6915-15-7, Malic acid 7317-67-1
7360-38-5, Glyceryl tri-2-ethyl hexanoate 7665-99-8, Cyclic GMP
7678-95-7, Ethenvl estradiol 8029-68-3, Ichthammol 9004-53-9, Dextrin
9004-61-9, Hyaluronic acid 9004-73-3, PolyMethylsiloxane 9005-12-3,
Methyl phenyl polysiloxane 9005-32-7, Alginic acid 9005-49-6, Heparin,
biological studies 9005-67-8, Polyoxyethylene sorbitan monostearate
9007-28-7, Chondroitin sulfate 9050-30-0 9056-36-4, Keratan sulfate 9067-32-7, Sodium hyaluronate 9082-07-9, Chondroitin sulfate sodium salt
10417-94-4, Eicosapentaenoic acid 11042-64-1, γ-Oryzanol
11103-57-4, Vitamin A 12001-76-2, Vitamin B 15307-79-6, Sodium
18469-44-8 22071-15-4, Ketoprofen 17087-29-5, Trimethylalanine 18469-44-8 22071-15-4, Ketoprofen 24967-94-0, Dermatan sulfate 25013-16-5, Butylated hydroxyanisole 25915-66-8, L-Ascorbyl stearate
28474-90-0, L-Ascorbyl dipalmitate 29710-31-4, Cetyl octanoate 31566-31-1, Glycerin monostearate 32381-28-5, N,N'-Diacetylcystine
dimethyl ester 35602-69-8, Cholesteryl stearate 36653-82-4, Cetanol
56939-67-4 59870-68-7, Glabridin 60008-03-9, Glabrene 68797-35-3,
Dipotassium glycyrrhizinate 74438-74-7, L-Ascorbic acid distearate
83826-43-1, Octyl dodecyl myristate 92353-27-0, L-Ascorbic acid dioleate
103000-77-7, Glycyrrhezinic acid 108910-78-7 110369-28-3 110369-30-7
110369-32-9 110369-35-2 110369-36-3 121123-79-3 122715-02-0,
α-Borneol 123638-49-3 125913-31-7 128808-19-5 128808-20-8
128808-21-9 128808-22-0, L-Ascorbic acid sulfate sodium salt
128808-23-1 128808-24-2 128808-25-3 128808-26-4 129499-78-1,
```

L-Ascorbic acid glucoside 138069-07-5 161436-56-2 185323-25-5 404566-00-3, L-Ascorbic acid isopalmitate 616204-22-9, Argireline 745794-24-5 745794-25-6

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(skin compns. containing anti-aging peptides and polyhydric alcs. with other defined active components)

L13 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

2004:695458 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:230304

TITLE: Skin moisturizing, lightening, and

antiaging cosmetics and (quasi)drugs containing

shellfish collagens type I (a1)3

INVENTOR(S): Tada, Takahiro; Tsuji, Nobuhide; Adachi, Katsuvoshi PATENT ASSIGNEE(S): Mikimoto Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent. LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 2004238386	A	20040826	JP 2003-118440		20030423
PRIORITY APPLN. INFO.:			JP 2002-358821	A	20021211
AB Cosmetics and (quas	i)drugs	contain	(derivs of) shellfish	coli	lagen type

(α1)3 and skin moisturizers, softening agents, cell activators, anti-inflammatory agents, antioxidants, circulation promoters, and/or skin-lightening agents. Thus, a liquid cosmetic was

formulated containing pearl oyster collagen type I (al) 3 and Na hyaluronate.

Skin moisturizing, lightening, and antiaging cosmetics ΤI

and (quasi)drugs containing shellfish collagens type I (a1)3

. . . (derivs. of) shellfish collagen type I $(\alpha 1)$ 3 and skin AB moisturizers, softening agents, cell activators, anti-inflammatory agents,

antioxidants, circulation promoters, and/or skinlightening agents. Thus, a liquid cosmetic was formulated containing

pearl oyster collagen type I $(\alpha 1)$ 3 and Na hyaluronate. cosmetic drug shellfish collagen type I alphal; skin moisturizer

lightening antiaging cosmetic ovster collagen Polysiloxanes, biological studies

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Me Ph; skin moisturizing, lightening, and

antiaging cosmetics and (quasi)drugs containing shellfish collagens type I (α1)3 and other active ingredients)

Polysiloxanes, biological studies

RL: COS (Cosmetic use): THU (Therapeutic use): BIOL (Biological study): USES (Uses)

(Me; skin moisturizing, lightening, and antiaging

cosmetics and (quasi)drugs containing shellfish collagens type I (α1)3 and other active ingredients)

Cosmetics

(antiaging; skin moisturizing, lightening, and

antiaging cosmetics and (quasi)drugs containing shellfish collagens type I (α1)3 and other active ingredients)

Coffee products

(beans, extract; skin moisturizing, lightening, and

antiaging cosmetics and (quasi)drugs containing shellfish collagens type I $(\alpha 1)3$ and other active ingredients)

ΙT Oryza sativa

```
(bran, extract; skin moisturizing, lightening, and
   antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
   (α1)3 and other active ingredients)
Fagus crenata
   (bud, extract; skin moisturizing, lightening, and
   antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
   (α1)3 and other active ingredients)
Head and Neck
   (comb, extract; skin moisturizing, lightening, and
   antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
   (\alpha 1)3 and other active ingredients)
Blood serum
   (deproteinated, extract; skin moisturizing, lightening
   , and antiaging cosmetics and (quasi)drugs containing shellfish collagens
   type I (\alpha 1) 3 and other active ingredients)
Ampelopsis japonica
Asiasarum
Asparagus officinalis
Bifidobacterium
Blood
Cassia nomame
Chaenomeles lagenaria
Chiranthodendron pentadactylon
Coix lacryma-jobi
Crataequs cuneata
Crocus sativus
Eucalyptus
Fish
Glycine max
Humulus lupulus
Inula
Lactic acid bacteria
Lycopersicon esculentum
Molasses
Mollusca
Mucuna birdwoodiana
Ononis
Paeonia
Pisum sativum
Placenta
Psidium
Raspberry
Rosa multiflora
Rosa rugosa
Scutellaria baicalensis
Seaweed
Spleen
Vitis vinifera
Yeast
   (extract; skin moisturizing, lightening, and antiaging
   cosmetics and (quasi)drugs containing shellfish collagens type I
   (α1)3 and other active ingredients)
Momordica grosvenori
   (fruit, extract; skin moisturizing, lightening, and
   antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
   (a1)3 and other active ingredients)
Triticum aestivum
   (germ, extract; skin moisturizing, lightening, and
   antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
   (\alpha 1)3 and other active ingredients)
Tea products
   (leaves, extract; skin moisturizing, lightening, and
```

```
antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
     Fats and Glyceridic oils, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (macadamia nut; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (modified; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
ΤТ
    Cosmetics
        (moisturizers; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi) drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
     Polyethers, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (perfluoro; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
    Cicada
        (periostracum, extract; skin moisturizing, lightening,
        and antiaging cosmetics and (quasi)drugs containing shellfish collagens
        type I (a1)3 and other active ingredients)
     Sterols
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (phyto-; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
     Fluoropolymers, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (polyether-, perfluoro; skin moisturizing, lightening
        , and antiaging cosmetics and (quasi)drugs containing shellfish collagens
        type I (a1)3 and other active ingredients)
     Alcohols, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (polyhydric; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
     Circulation
        (promoters; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
        (proteins; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (\alpha 1)3 and other active ingredients)
     Sophora
        (radix, extract; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
        (α1)3 and other active ingredients)
        (rice, extract; skin moisturizing, lightening, and
        antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
```

(α1)3 and other active ingredients)

```
Acanthopanax
     (root bark, extract; skin moisturizing, lightening,
     and antiaging cosmetics and (quasi)drugs containing shellfish collagens
     type I (\alpha 1)3 and other active ingredients)
 Anti-inflammatory agents
  Antioxidants
  Beeswax
  Egg, poultry
  Glycyrrhiza glabra
  Honey
  Inflammation
 Matricaria recutita
 Oyster
  Royal jelly
  Saxifraga stolonifera
  Shellfish
     (skin moisturizing, lightening, and antiaging
     cosmetics and (quasi)drugs containing shellfish collagens type I
     (α1)3 and other active ingredients)
  Amino acids, biological studies
  Carbohydrates, biological studies
  Carboxvlic acids, biological studies
  Carotenes, biological studies
  Ceramides
  Cyclosiloxanes
  DNA
  Elastins
  Esters, biological studies
  Fatty acids, biological studies
 Fibronectins
 Glycolipids
  Hemoglobins
  Hormones, animal, biological studies
  Jojoba oil
  Keratins
  Lactoferrins
  Lanolin
  Mucins
 Mucopolysaccharides, biological studies
  Olive oil
  Paraffin oils
  Petrolatum
  Phospholipids, biological studies
  Protein hydrolyzates
  Proteins
 RNA
  Safflower oil
  RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
  USES (Uses)
     (skin moisturizing, lightening, and antiaging
     cosmetics and (quasi)drugs containing shellfish collagens type I
     (α1)3 and other active ingredients)
 Cosmetics
     (skin-lightening; skin moisturizing,
     lightening, and antiaging cosmetics and (quasi)drugs containing
     shellfish collagens type I (\alpha 1)3 and other active ingredients)
 Cantharis
     (tincture; skin moisturizing, lightening, and
     antiaging cosmetics and (quasi)drugs containing shellfish collagens type I
     (\alpha 1)3 and other active ingredients)
 Collagens, biological studies
```

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(type I, $(\alpha 1) 2\alpha 2$; skin moisturizing,

lightening, and antiaging cosmetics and (quasi)drugs containing shellfish collagens type I (al)3 and other active ingredients) Collagens, biological studies

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(type I, (α1)3; skin moisturizing, lightening

, and antiaging cosmetics and (quasi)drugs containing shellfish collagens type I $(\alpha 1)$ 3 and other active ingredients)

IT Lilium

(white, extract; skin moisturizing, lightening, and antiaging cosmetics and (quasi)drugs containing shellfish collagens type I (al)3 and other active ingredients)

50-21-5, Lactic acid, biological studies 50-28-2, Estradiol, biological studies 50-33-9, Phenylbutazone, biological studies 50-70-4, Sorbitol, biological studies 50-81-7, L-Ascorbic acid, biological studies 50-81-7D, Ascorbic acid, alkyl esters 50-99-7, Glucose, biological 51-35-4, Hydroxyproline 51-84-3, Acetylcholine, biological studies 52-53-9, Verapamil 52-90-4, Cysteine, biological studies studies 53-86-1, Indomethacin 56-40-6, Glycine, biological studies Alanine, biological studies 56-45-1, Serine, biological studies 56-65-5, Adenosine triphosphate, biological studies 56-81-5D, Glycerin, alkyl ethers 56-84-8, Aspartic acid, biological studies 56-85-9, Glutamine, biological studies 56-86-0, Glutamic acid, biological studies 56-87-1, Lysine, biological studies 56-89-3, Cystine, biological studies 57-11-4, Stearic acid, biological studies 57-13-6, Urea, biological studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 57-88-5, Cholesterol, biological studies 58-08-2, Caffeine, biological studies 58-55-9, Theophylline, biological studies 58-64-0, Adenosine diphosphate, biological studies 58-86-6, Xylose, biological studies 59-98-3, Tolazoline 60-18-4, Tyrosine, biological studies 60-32-2, &-Aminocaproic acid 60-92-4, Cyclic AMP 61-19-8, Adenosine monophosphate, biological studies 61-68-7, Mefenamic acid 63-68-3, Methionine, biological studies 63-91-2, Phenylalanine, biological studies 64-17-5, Ethanol, biological studies 65-71-4, Thymine 69-65-8, Mannitol 69-79-4, Maltose 69-89-6, 70-18-8, Glutathione, biological studies 70-26-8, Ornithine 70-47-3, Asparagine, biological studies 71-00-1, Histidine, biological studies 71-30-7, Cytosine 72-18-4, Valine, biological studies 72-19-5, Threonine, biological studies 73-22-3, Tryptophan, biological studies 73-24-5, Adenine, biological studies 73-32-5, Isoleucine, biological studies 73-40-5, Guanine 74-79-3, Arginine, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 81-13-0, Panthenol 87-69-4, Tartaric acid, biological studies 87-89-8, Inositol 87-99-0, Xvlitol 97-59-6, Allantoin 98-79-3, Pyrrolidonecarboxylic acid 99-20-7, Trehalose 108-46-3, Resorcin, biological studies 110-15-6, Succinic acid, biological studies 110-27-0, Isopropyl myristate 111-01-3, Squalane 111-02-4, Squalene 112-85-6, Behenic acid 112-92-5, Stearyl alcohol 115-77-5, Pentaerythritol, biological studies 122-48-5, Zingerone 128-37-0, Dibutylhydroxytoluene, biological studies 134-03-2 137-66-6, L-Ascorbyl palmitate 146-14-5, FAD 147-85-3, Proline, biological studies 149-32-6, Erythritol 298-57-7, Cinnarizine 331-39-5, Caffeic acid 372-75-8, Citrulline 404-86-4, Capsaicin 456-59-7, Cyclandelate 463-40-1, α -Linolenic acid 471-53-4, Glycyrrhetinic acid 481-49-2, Cepharanthine 489-84-9, Guaiazulene 497-76-7, Arbutin 506-26-3, γ-Linolenic acid 544-62-7, Batyl alcohol 544-63-8, Myristic acid, biological studies 551-15-5, Liquiritin 585-88-6, Maltitol 593-31-7, Selachyl alcohol 1135-24-6, Ferulic acid 1190-94-9, Hydroxylysine 1197-18-8, Tranexamic acid 1405-86-3,

Glycyrrhizinic acid 1406-16-2, Vitamin D 1406-18-4, Vitamin E 2444-46-4, Nonylic vanillylamide 3081-61-6, Theanine 5041-81-6, Isoliquiritin 6556-11-2, Inositol hexanicotinate 6915-15-7, Malic acid 7665-99-8, Cyclic GMP 7678-95-7, Ethenylestradiol 8029-68-3, Ichthammol 9004-53-9, Dextrin 9004-61-9, Hyaluronic acid 9005-32-7, Alginic acid 9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulfate 9050-30-0, Heparan sulfate 9056-36-4, Keratan sulfate 10417-94-4, Eicosapentaenoic acid 11042-64-1, γ-Oryzanol 11103-57-4, Vitamin A 12001-76-2, Vitamin B 15307-79-6, Sodium diclofenac 15687-27-1, Ibuprofen 18779-49-2, L-Ascorbic acid calcium salt 22071-15-4, Ketoprofen 24967-94-0, Dermatan sulfate 25013-16-5, Butylhydroxyanisole 25395-66-8, L-Ascorbyl stearate 27475-47-4 28474-90-0, L-Ascorbyl dipalmitate 29710-31-4, Cetyl octanoate 32381-28-5, N.N.-Diacetylcystine dimethyl ester 35602-69-8, Cholesteryl stearate 36653-82-4, Cetanol 56939-67-4, L-Ascorbic acid sulfate 59870-68-7, Glabridin 60008-03-9, Glabrene 74438-74-7 92353-27-0 108910-78-7, L-Ascorbic acid phosphate magnesium salt 110369-28-3 110369-30-7 110369-32-9 110369-35-2 110369-36-3 121123-79-3, L-Ascorbic acid potassium salt 122715-02-0, α-Borneol 123638-49-3, L-Ascorbic acid aluminum salt 125913-31-7, L-Ascorbic acid phosphate 128808-19-5 128808-20-8 128808-21-9 128808-22-0, L-Ascorbic acid sulfate sodium salt 128808-23-1, L-Ascorbic acid phosphate aluminum salt 128808-23-2, L-Ascorbic acid phosphate calcium 128808-25-3, L-Ascorbic acid phosphate potassium salt 128808-26-4, L-Ascorbic acid phosphate sodium salt 129499-78-1, L-Ascorbic acid glucoside 137995-21-2, L-Ascorbic acid magnesium salt 138069-07-5 161436-56-2, L-Ascorbyl tetraisopalmitate 404566-00-3, L-Ascorbic acid isopalmitate 745794-24-5 745794-25-6 745794-26-7 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(skin moisturizing, lightening, and antiaging cosmetics and (quasi)drugs containing shellfish collagens type I (α1)3 and other active ingredients)

L13 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN 2004:162578 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 140:187005

TITLE: Antiaging compositions containing ascorbates and adenylic acids

Wakamatsu, Kosaburo; Harano, Fumiki; Koba, Takashige;

Shinohara, Shigeo PATENT ASSIGNEE(S):

Otsuka Pharmaceutical Co., Ltd., Japan

PCT Int. Appl., 29 pp.

CODEN: PIXXD2

Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

DOCUMENT TYPE:

SOURCE:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2004016238	A1 20040226	WO 2003-JP9783	20030801
W: AU, BR, CA,	CN, ID, IN, KR,	PH, US	
RW: AT, BE, BG,	CH, CY, CZ, DE,	DK, EE, ES, FI, FR, GB,	GR, HU, IE,
IT, LU, MC,	NL, PT, RO, SE,	SI, SK, TR	
JP 2004067576	A 20040304	JP 2002-228368	20020806
JP 4129574	B2 20080806		
CA 2493496	A1 20040226	CA 2003-2493496	20030801
AU 2003252312	A1 20040303	AU 2003-252312	20030801
EP 1547577	A1 20050629	EP 2003-788027	20030801
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, SI, FI,	RO, CY, TR, BG,	CZ, EE, HU, SK	

```
BR 2003013274 A 20050705 BR 2003-13274 20030801 CN 1674863 A 20050928 CN 2003-818967 20030801 N 2005000392 A 20081205 IN 2005-00392 200550202 US 20050250710 A1 20051110 US 2005-523605 20050204
PRIORITY APPLN. INFO.:
                                               JP 2002-228368 A 20020806
WO 2003-JP9783 W 20030801
    It is intended to provide an antiaging composition by which skin aging can be
AB
     effectively retarded and, in particular, skin pigmentation can be
     improved. It is also intended to provide a method of potentiating the
     antiaging effect of ascorbic acid or its analog. Namely, an antiaging
     composition characterized by containing (A) at least one member selected from
the
     group consisting of ascorbic acid, its derivs. and salts thereof; and (B)
     a purine nucleic acid-related substance. A method of using (A) at least
     one member selected from the group consisting of ascorbic acid, its
     derivs. and salts thereof together with (B) a purine nucleic acid-related
     substance to thereby potentiate the antiaging effect of the component A.
     For example, a lotion contained AMP 2, ascorbic acid 2-glucoside 2,
     1,3-butylene glycol 2, concentrated glycerin 2, polyoxyethylene sorbitan
     monolaurate 1, ethanol 5, preservatives q.s., pH modifiers to pH 6.5, and
     distilled water balance to 100 %.
REFERENCE COUNT:
                          6
                                 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                                  RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT
     antiaging cosmetic ascorbate adenosine phosphate; skin
     lightening cosmetic ascorbate adenosine phosphate
     Cosmetics
        (skin-lightening; antiaging cosmetics containing
        ascorbate and adenosine phosphate)
     50-81-7, L-Ascorbic acid, biological studies 60-92-4, Cyclic adenosine
     3',5'-monophosphate 61-19-8, Adenosine 5'-monophosphate,
     biological studies 84-21-9, Adenosine 3'-monophosphate
     130-49-4, Adenosine 2'-monophosphate 4578-31-8, Adenosine
     5'-monophosphate disodium salt 27556-18-9 119588-63-5 129499-78-1,
     L-Ascorbic acid 2-glucoside 183476-82-6
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (antiaging cosmetics containing ascorbate and adenosine phosphate)
L13 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:818240 CAPLUS
DOCUMENT NUMBER:
                          139:296572
TITLE:
                          Composition containing purine an pyrimidine nucleic
                          acid-related substances for promoting cell
                          proliferation
INVENTOR(S): Kawamura, Mitsuaki; Shinohara, Shigeo PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan SCURCE: PCT Int. Appl., 30 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                           Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                  KIND DATE APPLICATION NO. DATE
     PATENT NO.
     W0 2003084485 A1 20031016 W0 2003-JP4247 20030403
W: AU, BR, CA, CN, ID, IN, JP, KR, PH, US
          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
              IT, LU, MC, NL, PT, SE, SI, SK, TR
     CA 2480080 A1 20031016 CA 2003-2480080 20030403
AU 2003220857 A1 20031020 AU 2003-220857 20030403
AU 2003220857 B2 20090129
EP 1498101 A1 20050119 EP 2003-715748 20030403
```

```
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK
    BR 2003009127
                       A
                                       BR 2003-9127
                                                              20030403
                             20050201
                             20050727
                                        CN 2003-808030
                                                              20030403
    CN 1646078
                        Α
    TW 260225
                       B
                            20060821 TW 2003-92108012
                                                              20030408
    IN 2004DN02911
                       A
                            20070525
                                       IN 2004-DN2911
                                                              20040928
    US 20050222076
                       A1 20051006
                                        US 2004-510738
                                                              20041012
PRIORITY APPLN. INFO .:
                                         JP 2002-106300
                                                           A 20020409
                                         WO 2003-JP4247
                                                           W 20030403
```

It is intended to provide a method of effectively exerting the cell proliferation promoting effect of a purine nucleic acid-related substance. Namely, disclosed are a composition for cell proliferation characterized by containing a purine nucleic acid-related substance and a pyrimidine nucleic acid-related substance; a method of potentiating the cell proliferation promoting effect of a purine nucleic acid-related substance characterized by using a combination of the purine nucleic acid-related substance with a pyrimidine nucleic acid-related substance; and a method of promoting cell proliferation characterized by using a combination of a purine nucleic acid-related substance with a pyrimidine nucleic acid-related substance and applying the same to the skin or mucosa. The effect of adenosine monophosphate disodium salt in combination with uridine monophosphate disodium salt on cultured human keratinocyte proliferation was examined A cosmetic lotion containing adenosine monophosphate disodium salt 3, uridine monophosphate disodium salt 0.1, polyoxyethylene hydrogenated castor oil 0.7, ethanol 5, glycerin 2, preservative 0.2, fragrance/pH adjuster q.s., and water balance to 100 % was formulated.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Cosmetics

(skin-lightening; composition containing purine an pyrimidine nucleic acid-related substances for promoting cell proliferation)

IT 58-61-7, Adenosine, biological studies 58-63-9, Inosine 58-96-8, Uridine 58-97-9, Uridine phosphate, biological studies 61-19-8, Adenosine phosphate, biological studies 66-22-8, Uracil, biological studies 68-94-0, Hypoxanthine 73-24-5, Adenine, biological studies 131-99-7, Inosinic acid 951-78-0, Deoxyuridine 964-26-1 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(composition containing purine an pyrimidine nucleic acid-related substances for $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

promoting cell proliferation)

L13 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:41974 CAPLUS

DOCUMENT NUMBER: 128:106245

ORIGINAL REFERENCE NO.: 128:20735a,20738a

TITLE: Skin-lightening and antiaging cosmetics

INVENTOR(S): Seiki, Hitoshi; Okano, Yuri
PATENT ASSIGNEE(S): NOEVIR Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007541	A	19980113	JP 1996-181321	19960620
PRIORITY APPLN. INFO.:			JP 1996-181321	19960620

```
ΔR
    Skin-lightening and antiaging cosmetics comprise: (A)
    lipoic acid and (B) compds. selected from vitamin A or its derivs.,
    carotenes, riboflavin or its derivs., vitamin B6 or its salts or derivs.,
    cobalamins, vitamin C or its salts or derivs., vitamin E or its derivs.,
    vitamin K, adenosine or its derivs., flavonoids and tannins, in addition to
    other ingredients.
    Skin-lightening and antiaging cosmetics
AB
    Skin-lightening and antiaging cosmetics comprise: (A)
    lipoic acid and (B) compds. selected from vitamin A or its derivs.,
    carotenes, riboflavin or. . .
    skin lightening antiaging cosmetic vitamin; adenosine
    flavonoid skin lightening antiaging cosmetic; tannin
    skin lightening antiaging cosmetic
ΤТ
    Cosmetics
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
    (Uses)
        (antiaging; skin-lightening and antiaging
       cosmetics)
    Carotenes, biological studies
    Corrinoids
    Flavonoids
    Tannins
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (skin-lightening and antiaging cosmetics)
    Cosmetics
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (skin-lightening; skin-lightening
       and antiaging cosmetics)
    Cosmetics
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (wrinkle-preventing; skin-lightening and antiaging
       cosmetics)
    50-81-7, Vitamin C, biological studies 56-65-5, ATP, biological studies
    58-64-0, ADP, biological studies 59-02-9, α-Tocopherol
    61-19-8, AMP, biological studies 65-23-6, Pyridoxine
                                                            66-72-8.
    Pyridoxal 68-19-9, Cyanocobalamine 68-26-8, Retinol
                                                              79-80-1.
    3-DehydroRetinol 83-88-5, Riboflavin, biological studies 85-87-0,
    Pyridoxamine 116-31-4, Retinal
                                      119-13-1, δ-Tocopherol
    120-80-9, 1,2-Benzenediol, biological studies 148-03-8,
    β-Tocopherol 302-79-4, Retinoic acid 432-70-2, α-Carotene
    462-20-4, Dihydrolipoic acid 472-87-7, 3-DehydroRetinal 472-93-5,
    γ-Carotene 490-46-0, EpiCatechin 490-83-5
                                                   1406-18-4, Vitamin E
    3884-47-7, Dihydrolipoamide 4159-20-0, 3-DehydroRetinoic acid
    7235-40-7, β-Carotene 7616-22-0, γ-Tocopherol 8059-24-3,
    Vitamin B6 11103-57-4, Vitamin A 12001-79-5, Vitamin K 13422-51-0,
                       13422-55-4, Methylcobalamine 125913-31-7, Ascorbic
    Hvdroxvcobalamine
    acid phosphate
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
    (Uses)
        (skin-lightening and antiaging cosmetics)
L13 ANSWER 9 OF 13 USPATFULL on STN
ACCESSION NUMBER:
                       2008:297655 USPATFULL
TITLE:
                       Composition for Prevention or Alleviation of
                       Pigmentation
INVENTOR(S):
                       Harano, Fumiki, Shiga, JAPAN
                       Shinohara, Shigeo, Shiga, JAPAN
                       Tanaka, Masahiko, Shiga, JAPAN
PATENT ASSIGNEE(S):
                       OTSUKA PHARMACEUTICAL CO., LTD., Tokyo, JAPAN (non-U.S.
```

corporation)

		NUMBER	KIND	DATE		
PATENT INFORMATION:	US	20080260878	A1	20081023		
APPLICATION INFO.:	US	2005-663303	A1	20050921	(11)	
	WO	2005-JP17363		20050921		
				20080513	PCT 371	date

DATE NUMBER PRIORITY INFORMATION: JP 2004-274454 20040922 JP 2004-376562 20041227 JP 2005-194428 20050701 DOCUMENT TYPE: Utility APPLICATION

FILE SEGMENT:

LEGAL REPRESENTATIVE: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP,

901 NEW YORK AVENUE, NW, WASHINGTON, DC, 20001-4413, US NUMBER OF CLAIMS:

EXEMPLARY CLAIM: 2 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 831

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A composition for the prevention or alleviation of pigmentation which can produce the higher effect of preventing or alleviating pigmentation. The composition for the prevention or alleviation of pigmentation comprises a combination of (A) at least one member selected from the group consisting of adenosine 5'-monophosphate and salts thereof with (B) at least one member selected from the group consisting of arbutin, ellagic acid, 4-alkylresorcinols, linoleic acid, tranexamic acid, salts of these, Chamomilla recuita extract, and Ubiquinone.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- . . . for preventing or improving skin pigmentation can prevent or DETD improve pigmentation of the skin, and therefore is useful as a skin-lightening composition, skin anti-aging composition, skin-dullness improving composition, or melasma improving composition.
- DETD . . as a cosmetic method. The method can effectively prevent or improve pigmentation of the skin, and therefore is useful as skin-lightening methods, skin anti-aging methods, skin-dullness improving methods, or melasma improving methods.
- . . of the invention is useful as a cosmetics and externally-applied preparation for the skin (pharmaceutical composition) for the purpose of skin-lightening, skin anti-aging, reduction of skin dullness, and amelioration of melanoma.
- 60-33-3, Linoleic acid, biological studies 61-19-8, Adenosine 5'-monophosphate, biological studies 108-46-3D, Resorcinol, alkyl derivs. 303-98-0, Coenzyme Q10 476-66-4, Ellagic acid 497-76-7, Arbutin 1197-18-8, Tranexamic acid

(cosmetic and drug composition for prevention or alleviation of skin pigmentation)

L13 ANSWER 10 OF 13 USPATFULL on STN

2006:215552 USPATFULL ACCESSION NUMBER:

TITLE: Topical Delivery of Trace Metals for Enzyme Modulation INVENTOR(S): Gupta, Shyam K., BIODERM RESEARCH, 5221 E. Windrose Drive, Scottsdale, AZ, UNITED STATES 85254

PATENT ASSIGNEE(S): BIODERM RESEARCH, Scottsdale, AZ, UNITED STATES (U.S.

corporation)

PATENT INFORMATION: US 20060183708 A1 20060817 APPLICATION INFO.: US 2006-308290 A1 20060315 (11)

RELATED APPLN. INFO .: Continuation-in-part of Ser. No. US 2002-306948, filed

on 29 Nov 2002, PENDING

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SHYAM K. GUPTA, BIODERM RESEARCH, 5221 E. WINDROSE

DRIVE, SCOTTSDALE, AZ, 85254, US

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Page(s)

LINE COUNT: 1266

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for topical delivery of trace

metals for the modulation of certain metalloenzymes. The method of topical delivery of the present invention comprises; (i) mixing of a trace metal salt of a phosphorylated nitrogen heterocyclic base complexed with a chelating agent [FIG. 1], and (ii) a carrier, and (iii) topical application of said mixture. The modulation of metalloenzymes such as Superoxide Dismutase, Elastase, Tyrosinase, Matrix metalloproteases, and Ubiquitin-Proteasome pathway by the methods of the present invention is useful for providing anti-inflammatory, skin whitening, wrinkles reduction, skin aging

skin whitening, wrinkles reduction, skin aging control, cellular antioxidant, acne control, hair growth modulation, and skin damage control benefits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- AB . . . Dismutase, Elastase, Tyrosinase, Matrix metalloproteases, and Ubiquitin-Proteasome pathway by the methods of the present invention is useful for providing anti-inflammatory, skin whitening , wrinkles reduction, skin aging control, cellular antioxidant, acne
- control, hair growth modulation, and skin damage control benefits.

 SUMM Dismutase, Elastase, Tyrosinase, Matrix metalloproteases, and
 Ubiquitin-Proteasome pathway by the method of the present invention is
 - Ubiquitin-Proteasome pathway by the method of the present invention is useful for providing anti-inflammatory, skin whitening , wrinkles reduction, skin aging control, cellular antioxidant, acne control, hair growth modulation, and skin damaqe control benefits.
- SUMM ... applications in areas that require their enhanced bioavailability into deeper layers of skin, for example anti-aging, collagen synthesis enhancement, and skin whitening. Superoxide diamutase itself has been used in topical applications for antiaging compositions. However, the molecular weight of this enzyme is.
- SUMM . . . Advanced Glycation End Products (AGES). The modulation of such enzyme functions now provides topical skin care benefits such as antiaging, skin whitening, acne control, skin condition improvement, collagen promotion, wrinkles reduction, hair growth modulation, and intra-cellular antioxidant via a single trace metals.
- IT 54-47-7, Pyridoxal-5-phosphate 56-65-5, Adenosine triphosphate, biological studies 56-81-5, Glycerin, biological studies 58-64-0, Adenosine diphosphate, biological studies 59-43-8D, Vitamin BI, phosphorylated derivs. 60-00-4, EDTA, biological studies 61-19-8, Adenosine monophosphate, biological studies 61-16-8, Alcohol, biological studies 65-86-1, Orotic acid 70-18-8, Clutathione, biological studies 7-92-9, Citric acid, biological studies 98-98-6, Picolinic acid 107-21-1, 1,2-Ethanediol, biological studies 111-90-0 526-95-4, D-Gluconic acid 532-40-1, Tinamine phosphate 2163-42-0, Methylpropanediol 22457-89-2, Benfotiamine 25322-68-3, Polyethylene glycol 25618-55-7, Polyglycerol 59113-36-9, Diglycerol

(topical delivery of trace metals for enzyme modulation)

L13 ANSWER 11 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2006:46418 USPATFULL

TITLE: Cosmetic or pharmaceutical composition for skin care INVENTOR(S): Gupta, Shyam K., Scottsdale, AZ, UNITED STATES

Hoyt, Edward G., Fountain Hills, AZ, UNITED STATES

PATENT ASSIGNEE(S): Infinity2 Health Sciences, Inc. (U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2004-603477P 20040820 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: THORPE NORTH & WESTERN, LLP., 8180 SOUTH 700 EAST, SUITE 200, SANDY, UT, 84070, US

NUMBER OF CLAIMS: 65

EXEMPLARY CLAIM: 1 LINE COUNT: 1288

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to a cosmetic or pharmaceutical composition to reduce skin damage caused by aging and/or the environment. The composition can include a genus Centipeda plant extract, a trace metal source in a skin absorbing form in an amount effective for activating or enhancing superoxide dismutase enzyme, and a carrier suitable for topical administration. The compound may alternatively include a genus Centipeda plant extract and a low molecular weight transporter and an ion-pair delivery system including a

alternatively include a genus Centipeda plant extract and a low molecular weight transporter and an ion-pair delivery system including a donating composition and an accepting composition, wherein the donating composition and the accepting composition are combined to form a bound ion-pair, and a carrier suitable for topical administration.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . ingredients that can be used include oil-soluble skin

beneficial ingredients; water-soluble skin beneficial ingredients; hydroquinone, arbutin, hydroquinone derivatives and other skin whitening agents; dimethylaminoethanol (DMEA), alpha-lipoic acid, coenzyme Q10 (ubiquinone), carnosine, and other anti-wrinkle and

acid, coenzyme Q10 (ubiquinone), carnosine, and other anti-wrinkle anti-aging agents; vitamin C; vitamin E; water-soluble. . . . IT 53-84-9, Nicotinamide adenine dinucleotide 56-65-5, Adenosine

triphosphate, biological studies 56-65-5D, Adenosine Triphosphate, reaction with copper and glutathion 56-73-5, Glucose-6-phosphate 58-64-0, ADP, biological studies 58-68-4, NADH 59-56-3 61-19-8, Adenosine monophosphate, biological studies 70-18-8D, Glutathione, reaction with ATP and copper 85-32-5, Guanosine monophosphate 86-04-4, Inosine diphosphate 131-99-7, 5'-Inosinic acid 146-14-5, Flavin adenine dinucleotide 146-91-8, Guanosine diphosphate

146-14-5, Flavin adenine dinucleotide 146-91-8, Guanosine diphosphate 488-69-7, Fructose-1,6-diphosphate 527-09-3 643-13-0, Fructose-6-phosphate 987-78-0, Citicholine 448-02-4, Zinc Gluconate 6485-39-8, Manganese Gluconate 7439-96-5, Manganese, biological studies 7440-50-8, Copper, biological studies 7440-50-8D, Copper, reaction with ATP and glutathione 7440-66-6, Zinc, biological studies 10139-18-1

15978-08-2, Fructose-1-phosphate 60880-81-1, Sucrose phosphate (cosmetic or pharmaceutical compns. for skin care)

L13 ANSWER 12 OF 13 USPATFULL on STN ACCESSION NUMBER: 2005:255579 USPATFULL TITLE: Composition for cell proliferation INVENTOR(S): Kawamura, Mitsuaki, Kyoto-shi, JAPAN Shinohara, Shigeo, Kvoto-shi, JAPAN

OTSUKA PHARMACEUTICAL CO., LTD., Tokvo, JAPAN (non-U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE US 20050222076 A1 20051006 PATENT INFORMATION: APPLICATION INFO.: US 2003-510738 A1 20030403 (10) WO 2003-JP4247 20030403

20041012 PCT 371 date

NUMBER DATE

PRIORITY INFORMATION: JP 2002-106300 20020409

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 901 NEW YORK AVENUE, NW, WASHINGTON, DC, 20001-4413, US

NUMBER OF CLAIMS: 38 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 906

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a method for effectively exerting a cell proliferation promoting effect of a purine nucleic acid-related substance. The present invention provides a composition for cell proliferation containing a purine nucleic acid-related substance and a pyrimidine nucleic acid-related substance. Further, the present invention provides a method for potentiating the cell proliferation promoting effect of the purine nucleic acid-related substance by using the purine nucleic acid-related substance in combination with the pyrimidine nucleic acid-related substance. Still further, the present invention provides a method for promoting cell proliferation, where the method comprising applying purine nucleic acid-related substance in combination with the pyrimidine nucleic acid-related substance to the skin or mucosa.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

. . . of Items 1 to 8 that is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, anti-dandruff, nail beautifying, and wound healing.

Item 10. A composition for cell proliferation according. . . of Items 1 to 8 that is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, nail

beautifying, and wound healing.

Item 11. A composition for cell proliferation according to. 17 to 21, wherein the composition is used for a purpose SUMM selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, anti-dandruff, nail beautifying, and wound healing.

Item 23. A method for potentiating a cell. . . 17 to 21, wherein the composition is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, nail beautifying, and wound healing.

Item 24. A method for potentiating a cell proliferation. .

. . . 25 to 34, wherein the composition is used for a purpose

selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, anti-dandruff, nail

beautifying, and wound healing.

- Item 36. A method for promoting cell proliferation. . . 25 to 34, wherein the composition is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening , anti-sagging, anti-dullness, anti-wrinkle, hair growth, nail beautifying, and wound healing.
- Item 37. A method for promoting cell proliferation according.
- DETD . . . can be used as a cosmetic or an externally-applied medical or quasi-medical drug for the purpose of anti-aging, moisturizing, anti-acne, skin whitening, anti-wrinkle, anti-sagging, anti-dullness, hair growth, anti-dandruff, nail beautifying, and wound healing. Preferable among these are a wide variety of externally-applied medical agents for the purpose of anti-aging, moisturizing, anti-acne, skin whitening, anti-wrinkle, anti-sagging, anti-dullness, hair growth, nail
- beautifying, and wound healing. In particular, the composition of the present invention can effectively. DETD . . . the method of the present invention is used for preparing a
- composition that exhibits the effects of anti-aging, moisturizing, anti-acne, skin whitening, anti-wrinkle, anti-sagging, anti-dullness, hair growth, anti-dandruff, nail beautifying, wound healing, etc. due to the cell proliferation promoting effect of a. . . method of the present invention and exhibit the above-described effects are those that exhibit the effects of anti-aging, moisturizing, anti-acne, skin whitening, anti-wrinkle, anti-sagging, anti-dullness, hair growth, nail beautifying, wound healing, etc. Particularly preferable is a
- composition that exhibits an anti-wrinkle effect.. . . DETD . . . promote cell proliferation. Accordingly, the method of the present invention can be used for the purpose of anti-aging, moisturizing, anti-acne, skin whitening,

anti-wrinkle, anti-sagging, anti-dullness, hair growth, anti-dandruff, nail beautifying, wound healing, etc. Preferably, the method of the invention is used for the purposes of anti-aging, moisturizing, anti-acne, skin whitening, anti-wrinkle,

anti-sagging, anti-dullness, hair growth, nail beautifying, wound

healing, etc. In particular, the method of the present invention is . . useful for cosmetics and external preparations for the skin (medical and quasi-medical drugs) that are effective for anti-aging,

moisturizing, anti-acne, skin whitening, anti-wrinkle, anti-sagging, anti-dullness, hair growth, anti-dandruff, nail beautifying, wound healing, etc.

. . . cell proliferation promoting effects with a small amount of the purine nucleic acid-related substance, and exhibits excellent anti-aging, moisturizing, anti-acne, skin whitening, anti-wrinkle, anti-sagging, anti-dullness, hair growth, anti-dandruff,

nail beautifying, wound healing effects, etc. DETD . . . the method for promoting cell proliferation, cell

proliferation can be effectively promoted, and thus the effects of anti-aging, moisturizing, anti-acne, skin whitening, anti-wrinkle, anti-sagging, anti-dullness, hair growth, anti-dandruff, nail beautifying, wound healing, etc. can be provided to the skin and mucosa.

CLM What is claimed is:

DETD

DETD

. . proliferation according to claim 1 that is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, anti-dandruff, nail

beautifying, and wound healing.

CLM What is claimed is:

. . proliferation according to claim 1 that is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, nail beautifying, and wound healing.

CLM What is claimed is:

. . to claim 15, wherein the composition is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, anti-dandruff, nail beautifying, and wound healing.

CLM What is claimed is:

. . to claim 15, wherein the composition is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, nail beautifying, and wound healing.

CLM What is claimed is:

. . to claim 22, wherein the composition is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, anti-dandruff, nail beautifying, and wound healing.

CLM What is claimed is:

- . . to claim 22, wherein the composition is used for a purpose selected from the group consisting of anti-aging, moisturizing, anti-acne, skin whitening, anti-sagging, anti-dullness, anti-wrinkle, hair growth, nail beautifying, and wound healing.
- 58-61-7, Adenosine, biological studies 58-63-9, Inosine 58-96-8, Uridine 58-97-9, Uridine phosphate, biological studies 61-19-8 , Adenosine phosphate, biological studies 66-22-8, Uracil, biological studies 68-94-0, Hypoxanthine 73-24-5, Adenine, biological studies 131-99-7, Inosinic acid 951-78-0, Deoxyuridine 964-26-1 (composition containing purine an pyrimidine nucleic acid-related

substances for

promoting cell proliferation)

L13 ANSWER 13 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2004:138722 USPATFULL TITLE:

Trace Metals synergized copper nucleotides and copper glycosides for anti-aging and antiviral compositions INVENTOR(S): Gupta, Shyam K., Scottsdale, AZ, UNITED STATES

A1	20040603		
A1	20021129	(10)	
		5221 E.	WINDROSE
	A1 BIODERM	A1 20021129	A1 20021129 (10) BIODERM RESEARCH, 5221 E.

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 4 Drawing Page(s) 1277

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

I have discovered that trace metals such as copper, zinc, iron, and manganese that are necessary for the proper functioning of superoxide dismutase (SOD) and other deactivators of active-oxygen molecules (which cause aging of skin and other skin disorders), can be delivered from the topical compositions. This is achieved by the preparation of copper and other trace metal complexes with phosphorylated nucleosides, such as nucleotides, and phosphorylated monosaccharides, such as phosphorylated glycosides which act as small molecular weight (SMW) transporter molecules. These trace metal complexes of nucleotides and glycosides can be prepared by an in-situ method in water, water-miscible organic solvent, or a mixture of water and water-miscible organic solvent from commonly available ingredients in concentrations that are desirable and can be accurately controlled. I have additionally discovered compositions to achieve the transport of copper from the surface layers of skin into the deeper layers of skin utilizing SMW transporter molecules; and the intra-cellular storage of copper ions in the cell, for example in a bound form with glutathione; and the intra-cellular transport of copper from glutathione to SOD apoprotein by metallochaperones; and the supply of energetic molecules, such as ATP, ADP, or phosphorvlated saccharides for SOD metallochaperones to perform their intra-cellular metal transfer function. These cosmetic or pharmaceutical compositions are useful for antiaging and antiviral benefits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- SUMM . applications in areas that require their enhanced bioavailability into deeper layers of skin, for example anti-aging, collagen synthesis enhancement, and skin whitening.

 Superoxide dismutase itself has been used in topical applications for antiaging products. However, the molecular weight of this enzyme is.
- DETD ... ingredients, examples of particular ingredients include oil-soluble skin beneficial ingredients; water-soluble skin beneficial ingredients; hydroquinone, arbutin, hydroquinone derivatives and other skin whitening agents; dimethylaminoethanol (DMEA), alpha-lipoic acid, coenzyme Q10 (ubiquinone), carnosine, and other anti-wrinkle and anti-aqing agents; vitamin C; vitamin E; water-soluble.
- ΙT 53-84-9, NAD 56-65-5, ATP, biological studies 56-73-5, Glucose 6-phosphate 58-64-0, ADP, biological studies 58-68-4, NADH 59-56-3 61-19-8, AMP, biological studies 70-18-8, Glutathione, biological studies 85-32-5, Guanvlic acid 86-04-4, Inosine diphosphate 98-98-6D, Picolinic acid, reaction with copper 131-99-7, Inosinic acid 142-71-2, Copper acetate 146-14-5, FAD 146-91-8, Guanosine diphosphate 328-50-7D, reaction with copper, manganese and zinc 488-69-7, Fructose 1,6-diphosphate 527-09-3, Copper gluconate 546-46-3, Zinc citrate 551-64-4 557-09-5, Zinc caprylate 557-34-6, Zinc acetate 616-91-1, N-Acetylcysteine 637-82-1, Manganese succinate 643-13-0, Fructose 6-phosphate 987-78-0, Citicholine 1300-26-1, Zinc glycerophosphate 1320-46-3, Manganese glycerophosphate 2180-18-9, Manganese acetate 2847-05-4, Zinc malate 3251-23-8 3890-89-9, Copper caprylate 4468-02-4, Zinc gluconate 6228-53-1, Zinc succinate 6485-39-8, Manganese gluconate 6819-13-2, Manganese caprylate 7268-91-9, Copper succinate 7439-96-5, Manganese, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7447-39-4, Copper chloride (CuCl2), biological studies 7646-85-7, Zinc chloride, biological studies 7733-02-0, Zinc sulfate 7758-98-7, Copper sulfate, biological studies 7779-88-6, Zinc nitrate 7785-87-7, Manganese sulfate 10024-66-5, Manganese citrate 10139-18-1, Glucose 1,6-diphosphate 10377-66-9, Manganese nitrate 10402-15-0, Copper citrate 11132-78-8, Manganese chloride

12040-65-2D, Glycerophosphate, reaction with copper 13479-54-4, Copper 13870-80-9, Copper histidinate 13870-82-1 13985-65-4, glycinate Copper methioninate 14049-88-8 14281-77-7 14281-83-5, Zinc glycinate 14998-36-8, Manganese tartrate 15158-11-9D, Copper II, complexes with amino acids or peptides or nucleotides or proteins 15628-81-6 15978-08-2, Fructose 1-phosphate 16039-52-4, Copper lactate 16039-53-5, Zinc lactate 16283-36-6, Zinc salicylate 16351-10-3, Manganese ascorbate 16397-91-4D, Manganese II, complexes with amino acids or peptides or nucleotides or proteins 16743-16-1, Zinc histidinate 16827-84-2 17263-55-7, Copper malate 17949-65-4, Zincpicolinate 18917-85-6 20936-31-6, Copper salicylate 21512-99-2 21676-62-0 23333-98-4, Zinc lysinate 23713-49-7D, Zinc II, complexes with amino acids or peptides or nucleotides or proteins 24640-31-1 24887-16-9, Zinc pyruvate 27004-40-6, Copper tartrate 28029-54-1 30827-46-4 33010-91-2, Copper fumarate 34992-53-5 36015-31-3 36393-20-1, Zinc aspartate 40816-51-1 51877-53-3, Manganese lactate 51914-60-4, Zinc nicotinate 52723-61-2, Zinc fumarate 59866-25-0 59949-07-4 60880-81-1, Sucrose phosphate 61024-52-0 81876-67-7 81899-04-9 83455-26-9 84493-88-9 85169-07-9 112983-87-6 145482-34-4, Manganese pyruvate 151728-40-4, Zinc ascorbate 173364-38-0 173521-41-0

(trace metals synergized copper nucleotides and copper glycosides for anti-aging and antiviral compns.)

=> END

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y) /N/HOLD: Y

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 FULL ESTIMATED COST
 232.50
 292.79

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
CA SUBSCRIBER PRICE SESSION
-22.14 -22.14 -22.15

STN INTERNATIONAL LOGOFF AT 11:55:49 ON 05 MAY 2009